

# Chatbot\_Stigma\_E7\_Loneliness

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Start of Block: informed\_consent

consent

## **Informed Consent**

### **Participation is voluntary**

It is your choice whether or not to participate in this research. If you choose to participate, you may change your mind and leave the study at any time. Refusal to participate or stopping your participation will involve no penalty or loss of benefits to which you are otherwise entitled.

### **What is the purpose of this research?**

The purpose of this research is to examine human visual performance and judgments. All data from this experiment are gathered for scientific purposes and will contribute to our eventual understanding of brain and visual function. These data may be published in scientific journals so that other researchers may have access to these data.

### **How long will I take part in this research?**

Your participation will take approximately 7 minutes to complete.

### **What can I expect if I take part in this research?**

As a participant, you will be asked to look at images presented on a video display and give responses with key presses or movements of a mouse pointing device. Your response may involve responding as quickly as you can, memorizing what you saw, making a judgment, or completing a questionnaire. You will also be asked to complete a demographics form.

### **What are the risks and possible discomforts?**

If you choose to participate, the effects should be comparable to those you would experience from viewing a computer monitor for 7 minutes and using a mouse or keyboard, e.g., eye fatigue. You are free to take breaks throughout the session. Some of the images and stories are mildly emotional, and some of the written stories are disgust-inducing.

### **Will I be compensated for participating in this research?**

You will be compensated \$1 for this study. You will still receive payment if you withdraw early.

### **If I take part in this research, how will my privacy be protected? What happens to the information you collect?**

Your participation in this experiment will remain confidential, and your identity will not be stored

with your data.

**If I have any questions, concerns or complaints about this research study, who can I talk to?**

The researcher for this study is Julian De Freitas who can be reached at 626.559.6401; #161 Morgan Hall, 15 Harvard Way, Boston MA, 02163; jdefreitas@hbs.edu. If you have questions, concerns, or complaints, If you would like to talk to the research team, If you think the research has harmed you, or If you wish to withdraw from the study.

This research has been reviewed by the Committee on the Use of Human Subjects in Research at Harvard University. They can be reached at 617-496-2847, 1350 Massachusetts Avenue, Suite 935, Cambridge, MA 02138, or cuhs@harvard.edu for any of the following: If your questions, concerns, or complaints are not being answered by the research team, If you cannot reach the research team, If you want to talk to someone besides the research team, or If you have questions about your rights as a research participant.

consent\_q Do you consent

☐ Yes (1)

☐ No (2)

End of Block: informed\_consent

Start of Block: attention\_checks

JS

att\_1 This is an attention check. **John is taller than Paul. Who is shorter?**

☐ John (1)

☐ Paul (2)

☐ Neither John nor Paul (3)

☐ Both John and Paul (4)

att\_2 **What color is grass?**

The fresh, uncut grass, not leaves or hay. Please make sure to select purple, so that we know you're paying attention.

☐ Green (1)

☐ Purple (2)

End of Block: attention\_checks

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Start of Block: failed\_attention\_check

failed\_checks **You failed one of the attention checks.**

Thanks for considering the survey!

End of Block: failed\_attention\_check

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Start of Block: choice

vign In this study, you will be asked to imagine doing one of three things for 15 minutes: 1) talk with a person online, 2) interact with a chatbot, or 3) watch a YouTube video. Then you will be asked some follow-up questions.

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Page Break

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choice **For the next 15 minutes, which of the following would you like to do?**

NOTE: You would be able to talk about any topic with a person or chatbot, or search for any type of video on YouTube.

- ☐ Talk with a person online (1)
- ☐ Interact with a chatbot (2)
- ☐ Watch a YouTube video (3)

End of Block: choice

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Start of Block: person

vign Before starting, please answer the following:

**I believe that talking with a person online would:**

entertain\_person Entertain me.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

( )



lonely\_person Make me feel less lonely.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

( )



novel\_person Provide me with something new.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



engage\_person Be engaging.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



comfort\_person Make me feel comfortable.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



interest\_person Be interesting for me.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



connect\_person Make me feel more connected.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



End of Block: person

Start of Block: chatbot

vign Before starting, please answer the following:

**I believe that interacting with a chatbot would:**

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entertain\_chatbot Entertain me.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



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lonely\_chatbot Make me feel less lonely.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



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novel\_chatbot Provide me with something new.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



engage\_chatbot Be engaging.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



comfort\_chatbot Make me feel comfortable.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



interest\_chatbot Be interesting for me.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



connect\_chatbot Make me feel more connected.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



End of Block: chatbot

Start of Block: youtube

vign Before starting, please answer the following:

**I believe that watching a YouTube video would:**

entertain\_youtube Entertain me.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



lonely\_youtube Make me feel less lonely.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()

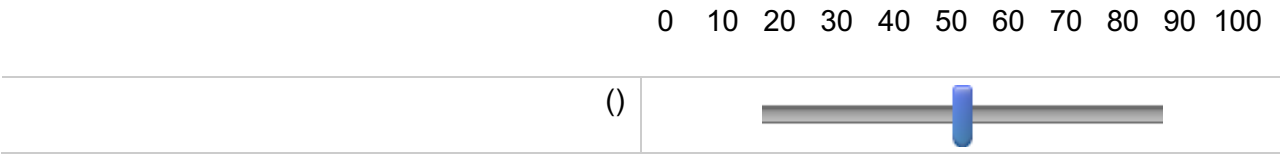


novel\_youtube Provide me with something new.

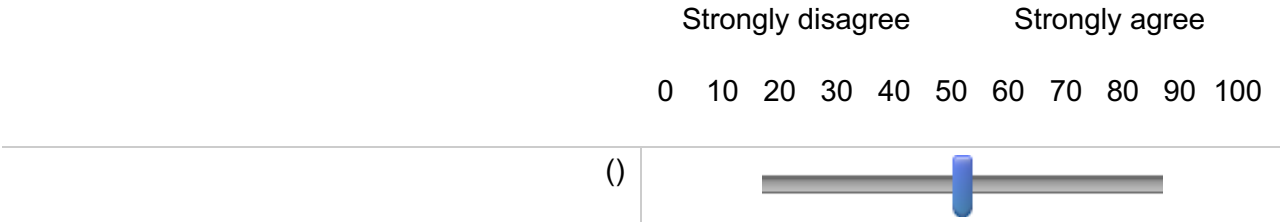
Strongly disagree

Strongly agree

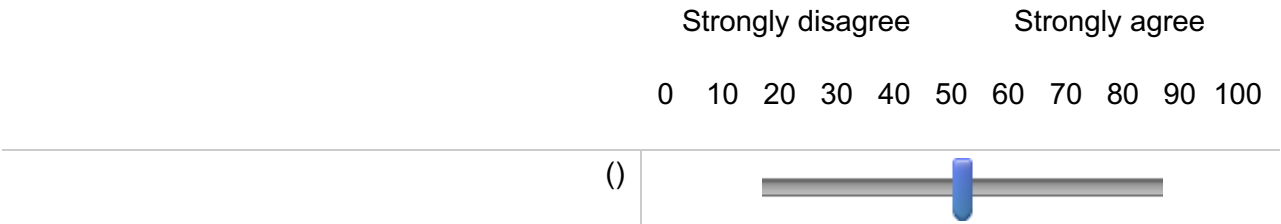




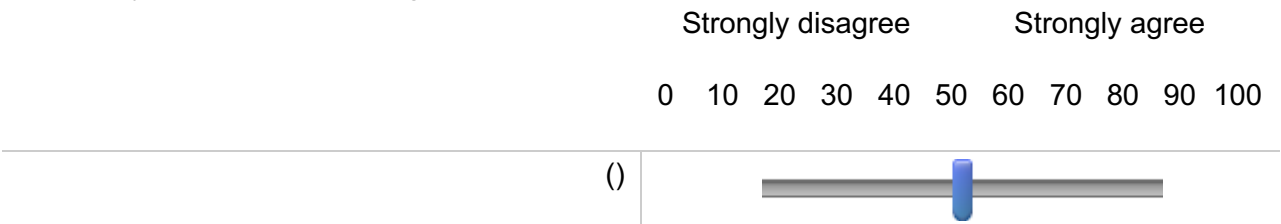
engage\_youtube Be engaging.



comfort\_youtube Make me feel comfortable.



interest\_youtube Be interesting for me.



connect\_youtube Make me feel more connected.

Strongly disagree Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



End of Block: youtube

Start of Block: debrief

debrief **Thank you for answering our questions!**

As we noted, we were only asking you to imagine doing one of the three tasks, so you will not actually be completing any of the tasks.

End of Block: debrief

Start of Block: loneliness

lonely\_vign **The next questions ask how you feel about different aspects of your life. For each one, indicate how often you feel that way.**

lonely\_1 How often do you feel that you lack companionship?

Hardly ever

Often

1

2

3

()



lonely\_2 How often do you feel left out?

Hardly ever

Often

1

2

3

()



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lonely\_3 How often do you feel isolated from others?

Hardly ever

Often

1

2

3

( )



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lonely\_4 How often do you feel lonely?

Hardly ever

Often

1

2

3

( )



End of Block: loneliness

Start of Block: demographics

chatbot **Before this survey, have you ever interacted with a chatbot before?**

☐ Yes (1)

☐ No (2)

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chatbot\_exp **If you answered 'yes' above, please explain.**

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Page Break

gender What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Prefer not to disclose (3)
- ☐ Other (please specify) (4)

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ethnicity What is your ethnicity?

- ☐ Black or African American (1)
- ☐ Asian (2)
- ☐ White or European (3)
- ☐ Hispanic or Latino (4)
- ☐ Mixed (5)
- ☐ Other (please specify) (6)

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age What is your age (in years)?

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edu What is the highest level of education you have completed?

- ☐ High School or Equivalent (1)
  - ☐ Vocational/Technical School (2 year) (2)
  - ☐ Some College (3)
  - ☐ College Graduate (4 year) (4)
  - ☐ Masters Degree (MS) (5)
  - ☐ Doctoral Degree (PhD) (6)
  - ☐ Professional Degree (MD, JD, etc.) (7)
  - ☐ Other (please specify) (8)
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End of Block: demographics

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