

Chatbot_Stigma_E5_serial_mediators

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 10 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

att1 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)

att2 **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

Start of Block: failed_attention_check

failed_checks You failed one of the attention checks. Thanks for considering the surveys!

End of Block: failed_attention_check

Start of Block: ai

ai_vignette **Please consider the following advertisement for a new app called "Chatty", which allows you to send text messages to an artificial intelligence (AI) companion.**

End of Block: ai

Start of Block: ai_dvs

willing_friend_ai How willing would you be to try to find a friend on Chatty?

Not willing at all Very Willing

0 10 20 30 40 50 60 70 80 90 100


()



willing_romantic_ai How willing would you be to try to find a romantic partner on Chatty?

Not willing at all Very Willing

0 10 20 30 40 50 60 70 80 90 100

()	
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wtp_ai **Imagine that you try out Chatty for a year, and that Chatty has a monthly subscription fee. How much would you be willing to pay per month? (typical apps cost anywhere between \$0.00c and \$10.00 per month.)**

Please enter only the amount, without the dollar sign.

End of Block: ai_dvs

Start of Block: ai_mediators

true_ai


How much do you agree with the following statement?

Any friendship with an AI on Chatty would **not** be a true friendship.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()	
-----	--

talk_listen_ai


How much do you agree with the following statement?

An AI on Chatty would always be there to **talk** and **listen** to you.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()	
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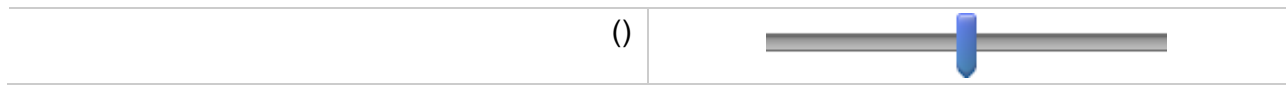
not_judge_ai **How much do you agree with the following statement?**

An AI on Chatty would always be on your side and not judge you.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



feel_ai

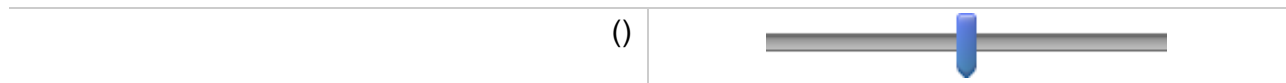
How much do you agree with the following statement?

An AI on Chatty is unable to feel emotions.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



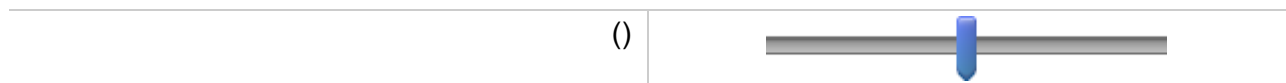
understand_ai **How much do you agree with the following statement?**

An AI on Chatty is unable to understand what you are saying.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



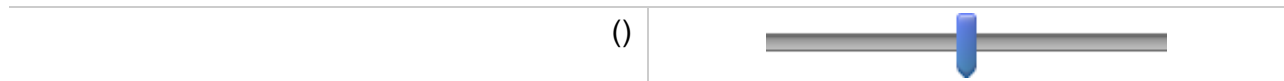
body_ai **How much do you agree with the following statement?**

An AI on Chatty cannot provide physical intimacy.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



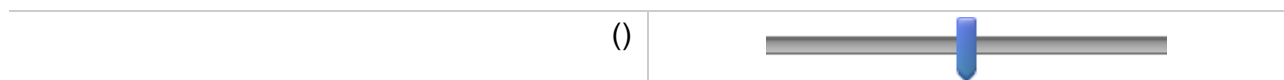
not_mutual_ai **How much do you agree with the following statement?**

A relationship with an AI on Chatty would be one-sided, not mutual.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



End of Block: ai_mediators

Start of Block: AI_nonMember

nonMember_AI

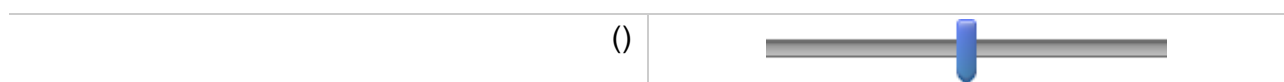
Does the following sound weird or OK to you?

There's a sense in which being friends with an AI on Chatty is a relationship, but ultimately, if you think about what it really means to be in a relationship, you'd have to say that there is a sense in which being friends with an AI on Chatty is not a relationship at all.

Definitely sounds
WEIRD

Definitely sounds OK

0 10 20 30 40 50 60 70 80 90 100



End of Block: AI_nonMember

Start of Block: human

human_vignette **Please consider the following advertisement for a new app called "Chatty", which allows you to send text messages to a human companion.**

End of Block: human

Start of Block: human_dvs

willing_friend_h **How willing would you be to try to find a friend on Chatty?**

Not willing at all Very Willing

0 10 20 30 40 50 60 70 80 90 100

()



willing_romantic_h **How willing would you be to try to find a romantic partner on Chatty?**

Not willing at all Very Willing

0 10 20 30 40 50 60 70 80 90 100

()



wtp_h **Imagine that you try out Chatty for a year, and that Chatty has a monthly subscription fee. How much would you be willing to pay per month? (typical apps cost anywhere between \$0.00c and \$10.00 per month.)**

Please enter only the amount, without the dollar sign.

End of Block: human_dvs

Start of Block: human_mediators

true_h

How much do you agree with the following statement?

Any friendship with a person on Chatty would **not** be a true friendship.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



talk_listen_h

How much do you agree with the following statement?

A person on Chatty would always be there to **talk** and **listen** to you.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



judge_h **How much do you agree with the following statement?**

A person on Chatty would always be on your side and not **judge** you.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



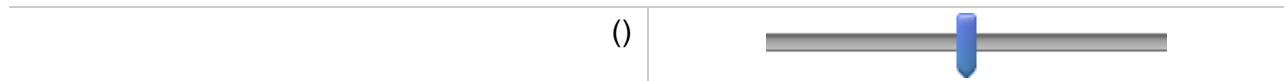
understand_h **How much do you agree with the following statement?**

A person on Chatty is unable to **understand** what you are saying.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



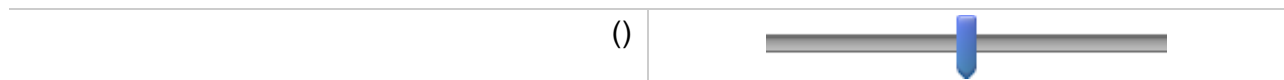
feel_h **How much do you agree with the following statement?**

A person on Chatty is unable to **feel** emotions.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



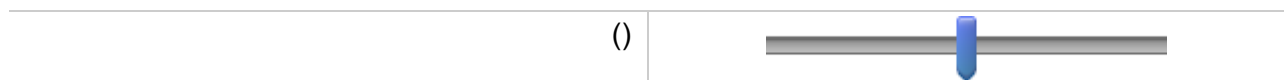
body_h **How much do you agree with the following statement?**

A person on Chatty cannot provide **physical** intimacy.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



mutual_h **How much do you agree with the following statement?**

A relationship with a person on Chatty would be **one-sided**, not mutual.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



End of Block: human_mediators

Start of Block: human_nonMember

nonMember_h

Does the following sound weird or OK to you?

There's a sense in which being friends with a person on Chatty is a relationship, but ultimately, if you think about what it really means to be in a relationship, you'd have to say that there is a sense in which being friends with a person on Chatty is not a relationship at all.

Definitely sounds
WEIRD

Definitely sounds OK

0 10 20 30 40 50 60 70 80 90 100

()



End of Block: human_nonMember

Start of Block: comp

comp_1 **You were shown a picture on a computer screen in a previous question. What did the picture represent?**

- ☐ A person (1)
- ☐ An AI (2)
- ☐ A dog (3)
- ☐ A vehicle (4)

comp_2 **What is Chatty?**

- ☐ A store (1)
- ☐ A messaging app (2)
- ☐ A house (3)
- ☐ An activity (4)

End of Block: comp

Start of Block: loneliness_scale

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

loneliness_1 How often do you feel that you lack companionship?

Hardly ever

Extremely often

0 10 20 30 40 50 60 70 80 90 100

()



loneliness_2 How often do you feel left out?

Hardly ever

Extremely often

0 10 20 30 40 50 60 70 80 90 100

()



loneliness_3 How often do you feel isolated from others?

Hardly ever

Extremely often

0 10 20 30 40 50 60 70 80 90 100

()



End of Block: loneliness_scale

Start of Block: sensation-seeking scale

sensation_vign **Please indicate the extent to which you agree with the following statements.**

sensation_1 I would like to explore strange places.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()



sensation_2 I get restless when I spend too much time at home.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100

()

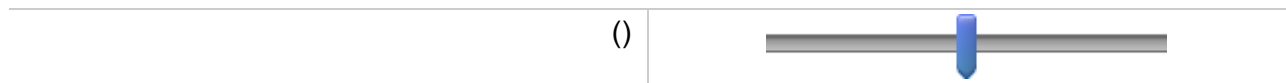


sensation_3 I like to do frightening things.

Strongly disagree

Strongly agree

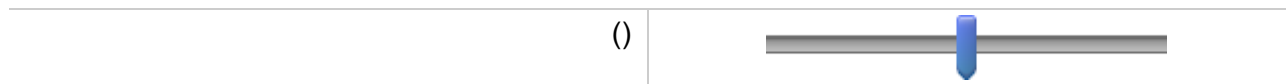
0 10 20 30 40 50 60 70 80 90 100



sensation_4 I like wild parties.

Strongly disagree Strongly agree

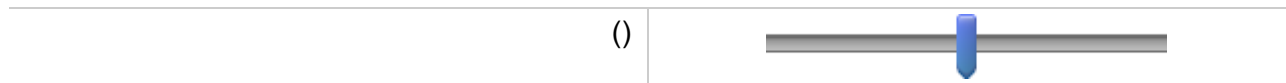
0 10 20 30 40 50 60 70 80 90 100



sensation_5 I would like to take off on a trip with no pre-planned routes or timetables.

Strongly disagree Strongly agree

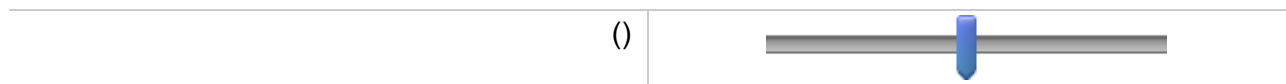
0 10 20 30 40 50 60 70 80 90 100



sensation_6 I prefer friends who are excitingly unpredictable.

Strongly disagree Strongly agree

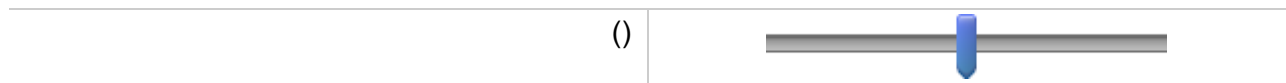
0 10 20 30 40 50 60 70 80 90 100



sensation_7 I would like to try bungee jumping.

Strongly disagree Strongly agree

0 10 20 30 40 50 60 70 80 90 100



sensation_8 I would love to have new and exciting experiences, even if they are illegal.

Strongly disagree

Strongly agree

0 10 20 30 40 50 60 70 80 90 100



End of Block: sensation-seeking scale

Start of Block: demographics

ai_companion_exp **Before this survey, have you ever used an artificial intelligence (AI) companion app before?**

☐ Yes (1)

☐ No (2)

ai_companion_exp2 **If you answered 'yes' above, please explain.**

Page Break

gender What is your gender?

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

ethnicity What is your ethnicity?

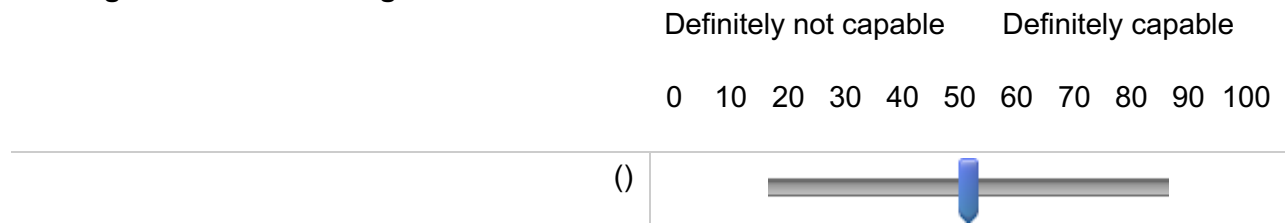
- ☐ Black or African American (1)
 - ☐ Asian (2)
 - ☐ White or European (3)
 - ☐ Hispanic or Latino (4)
 - ☐ Mixed (5)
 - ☐ Other (please specify) (6) _____
-

age What is your age (in years)?

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) _____
-

ai_capability **How capable do you think artificial intelligence (AI) is of becoming as intelligent as human beings?**



End of Block: demographics
