

STANFORD UNIVERSITY Research Information Sheet

Protocol Director: Dorsa Sadigh

IRB Use Only

Approval Date: 2022-10-20

Expiration Date: (Does not expire)

Protocol Title: **Learning Models of Human Behavior in Interaction with AI Agents****Purpose**

The purpose of this research study is to test and better understand interactions between humans and intelligent autonomous systems. In particular, in this part of the study we are focusing on simulated agents that can solve popular games and puzzles (e.g. crossword puzzles). We are collecting data of humans solving crossword puzzles to help design autonomous systems that are more useful and collaborative when interacting with humans.

Procedures

If you agree to be in this study, you will be asked to do the following:

- You will be given access to 6 different crossword puzzles to play.
- You will be allowed to pick any number of puzzles to play and spend as much time on them as you wish.
- For each puzzle, you will be provided an online interface which allows you to enter letters directly in the puzzle grid using your keyboard.
- After you have finished playing, you will fill in a questionnaire.
- We will only record your preference responses in each run and the results of the questionnaire.

Study duration

While we suggest spending around 30 minutes on a puzzle, you are welcome to spend as much time as you would like on any puzzle.

Risks/Discomforts

- The risks and discomfort associated with participation in this study are no greater than those ordinarily encountered in daily life. You will be only answering questions based on observing the behaviors of the simulated agent and the manipulator, and you will not be interacting with the system.
- Breach of confidentiality: As with all research, there is a chance that confidentiality could be compromised; however, we are taking precautions to minimize this risk.

Confidentiality

Your study data will be handled as confidentially as possible. If results of this study are published or presented, individual names will not be used.

To minimize the risks to confidentiality, we will do the following:

- We will store this consent form in a locked cabinet for 3 years after completion of the study.
- Only the researcher(s) and US Department of Defense, the sponsor of this study, will have access to your study records, which (aside from the consent forms) will not contain any identifiable information.

Future use of study data:

The research data will be maintained for possible use in future research. We will retain this data for up to 10 years after the study is over. The same measures described above will be taken to protect confidentiality of this study data.

Compensation/Payment

You may choose to spend as much time as you wish on this task, and therefore you will not receive compensation.

Costs

You will not be charged for any of the study activities.

Benefits

There is no direct benefit to you anticipated from participating in this study.

We cannot and do not guarantee or promise that you will receive any benefits from this study.

Rights

- 1) Participation is voluntary.
- 2) Refusal to participate will not involve penalty or loss of benefits to which subjects are otherwise entitled.
- 3) Subjects can discontinue participation at any time will not involve penalty or loss of benefits to which subjects are otherwise entitled.
- 4) You may refuse to answer particular questions.

Questions

If you have any questions or concerns about this study, you may contact Dorsa Sadigh at dorsa@cs.stanford.edu and Megha Srivastava at megha@cs.stanford.edu.

Consent

The US Department of Defense, the sponsor of this study, will have access to research records to ensure protection of research participants.

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the Stanford Institutional Review Board (IRB) to speak to someone independent of the research team at (650)-723-2480 or toll free at 1-866-680-2906. You can also email irb2-manager@lists.stanford.edu or write to the Stanford IRB, Stanford University, 3000 El Camino Real, Five Palo Alto Square, 4th Floor, Palo Alto, CA 94306.

If you agree to participate in this research, please indicate this to the researcher.

This copy of the consent document is yours to keep.

IRB approval date: 10/20/22
Expiration date: (Does Not Expire)