

Consent Form for Participation in Research

Study Title: Investigating Computational Approaches to Assess Teamwork

IRB Protocol Number: IRB-FY2021-168

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You may be eligible to take part in a research study. This form gives you important information about the study. It describes the purpose of the research, the risks and possible benefits of participating in the study.

Purpose of this Study

The quality of teamwork varies widely among teams and heavily depends on the shared understanding between the teammates. Our goal is to develop an AI coach that can assess and improve the quality of teamwork by observing team behavior. Through this experiment, we will collect data of humans performing collaborative tasks, which will be used to develop and evaluate the AI coach.

The results of this research may be included in a PhD dissertation by Sangwon Seo.

Procedures

If you volunteer to participate in this study, we will ask you to sign up for a remotely conducted (over the internet) experiment session. During the experiment, you will:

- Complete a demographic survey
- Perform several collaborative tasks in simulated environments (much like a video game)
 - View instructions about the task and simulated environment.

- Complete the collaborative task (which will be administered as mini games that simulate real-world collaboration scenarios).
- Review the completed task and provide annotations regarding the decisions made during the task.
- Answer questions regarding the task.
- Complete a post-experiment questionnaire.

The experiment session will run for up to 25 min.

Participant Requirements

The participant of this study should be:

1. At least 18 years old;
2. Proficient in English; and
3. Able to give valid informed consent.

Risks

The risks and discomfort associated with participation in this study are no greater than those ordinarily encountered in daily life while using computers.

Benefits

There are no personal benefits from your participation in this study but the knowledge received may be of value to humanity. In particular, the results of the study will inform development of computational approaches to evaluating and improving teamwork in human-human and human-robot teams.

Compensation and costs

You will receive a \$5 Amazon gift card for the successful completion of this experiment. If you complete the task with the best score, you will receive an extra \$5 Amazon gift card. Participants who withdraw in the middle of the experiment or who are not sufficiently engaged in the experiment will not receive this gift card. There will be no cost to you if you participate in this study.

Ending the Your Participation

Your participation in this study is entirely voluntary. You are free to refuse to be in the study and your refusal will not influence current or future relationships with Rice University.

Confidentiality

By participating in the study, you understand and agree that Rice University may be required to disclose your consent form, data and other personally identifiable information as required by law, regulation, subpoena or court order. Otherwise, your confidentiality will be maintained in the following manner:

Your data and consent form will be kept separate. Your consent form will be stored in a password-protected file. By participating, you understand and agree that the data and

information gathered during this study may be used by Rice University and published and/or disclosed by Rice University to others outside of Rice University. However, your name, address, contact information and other direct personal identifiers in your consent form will not be mentioned by Rice University in any such publication or dissemination of the research data and/or results. You will not be contacted for these future research projects and research will not be shared with you.

The researchers will take the following steps to protect participants' identities during this study: (1) Each participant will be assigned a number; (2) The researchers will record any data collected during the study by number, not by name; (3) Any original recordings or data files will be stored in a password-protected file.

Rights

Your participation is voluntary. You are free to stop your participation at any point. Refusal to participate or withdrawal of your consent or discontinued participation in the study will not result in any penalty or loss of benefits or rights to which you might otherwise be entitled. The Principal Investigator may at his/her discretion remove you from the study for any of a number of reasons. In such an event, you will not suffer any penalty or loss of benefits or rights which you might otherwise be entitled.

Right to Ask Questions and Contact Information

If you have any questions about this study, you should feel free to ask them now.

If you have questions later regarding the study or a research-related injury, or if you have complaints, concerns, suggestions about the research, desire additional information, or wish to withdraw your participation please contact the Principal Investigator by mail, phone or e-mail in accordance with the contact information listed on the first page of this consent.

For questions about your rights as a research participant, or to discuss problems, concerns or suggestions related to the research, or to obtain information or offer input about the research, you should contact a compliance administrator at Rice University. Email: irb@rice.edu or Telephone: 713-348-3586.

By continuing, you are indicating that you are at least 18 years old, have read and understood this consent form and agree to participate in this research study. Please print a copy of this page for your record.