

Survey Text: Nonverbal Human Signals Can Help Autonomous Agents Infer Human Preferences for Their Behavior

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CONSENT FOR PARTICIPATION IN A RESEARCH STUDY

IRB Protocol# X

Study Title: *Leveraging Implicit Feedback in Human-Agent Interactions*

Research Study Summary: We are asking you to join a research study. The purpose of this research study is to investigate the use of implicit feedback (e.g., facial expressions) to improve human-agent interactions (i.e., actions between humans and autonomous entities, such as robots or software that perceive their environment and take actions). Study activities will include: interacting with agents in a virtual environment, having your audio and video recorded, annotating data, and filling out surveys. Your involvement will require approximately 18 minutes. You must be 18 years of age or older, be fluent in English, and have normal or corrected-to-normal vision to participate in this study. By agreeing to participate in this study, you consent to being audio- and video-recorded during your interactions with agents in the virtual environment. This means that you need to have a webcam and microphone available in your computer to complete the study. By agreeing to participate in this study, you give your permission to share short portions of any video or audio recording for: Annotation (e.g., labeling perceived emotion from facial expressions) by third parties (e.g., students in the Lab at University, or crowd-sourcing via platforms like Amazon Mechanical Turk); Creation of a dataset for future research on implicit feedback; and Illustrative reasons in presentations of this work for scientific, educational, and publicity purposes. Due to the nature of video and audio recordings, confidentiality can not be guaranteed. However, we will make no effort to identify participants from audio or video data. The study will have no benefits to you. We hope our results will add to the knowledge about how to improve the interactions between humans and autonomous agents (i.e., entities that perform behaviors based on perception of environment without external control). Taking part in this study is your choice. You can choose to take part, or you can choose not to take part in this study. You also can change your mind at any time. Whatever choice you make will have no negative consequences. If you are interested in learning more about the study, please continue reading. At the end of this form, we will ask you if you wish to participate; if so, you will have to click "Accept to participate in the study".

Why is this study being offered to me?

We are asking you to take part in a research study because we want to understand how to best design autonomous agents that effectively interact with humans. Participants must be 18 years

of age or older, be fluent in English, and have normal or corrected-to-normal vision.

Who is paying for the study?

This study is supported by an Amazon Research Award and private funds.

What is the study about?

The purpose of this study is to investigate the use of implicit feedback (e.g., facial expressions) to improve human-agent interactions. We will also explore different annotation processes for the implicit feedback to better understand how we can effectively annotate this data and use it to create better social agents.

Research designs sometimes require that the full intent of the study not be explained prior to participation. Although we have described the general nature of the tasks that you will be asked to perform, the full intent of the study will not be explained to you until after the completion of the study. At that time, we will provide you with a full debriefing which will include an explanation of the purpose of the study and other relevant background information pertaining to the study. You may decide to withdraw from the study or have your data removed as well.

What are you asking me to do and how long will it take?

If you agree to take part, your participation in this study will involve interacting with agents in a virtual environment, such as a video game. While you interact with the agents, audio and video data will be collected via your computer microphone and webcam.

Throughout the study, you will be asked to complete short questionnaires, including a survey with demographics questions (e.g., age, gender, experience with robots and video games) and other questions about your experience in the virtual environment. We expect the study to take 18 minutes of your time.

Are there any risks from participating in this research?

There is a risk that you will be identified when the data is shared with other researchers. There is a risk of possible loss of confidentiality.

Are there any costs to participation?

You will not have to pay for taking part in this study.

Will I be paid for participation?

You will be paid for taking part in this study. The amount of payment depends on the expected length of the study as indicated above. The rate of payment is \$3.60 for 18 minutes. You will be paid when you have completed all the surveys. If you do not want to be audio and video taped, please do not participate in this study. By participating, you agree to permit these recordings.

How will you keep my data safe and private?

By agreeing to participate in this study, you give your permission to share portions of any video or audio recording for research or publication purposes. The researchers may use automated,

online commercial services (such as Google Cloud Speech API or Microsoft's Azure Cognitive Services APIs) to automatically analyze relevant portions of audio and video from the experiment. These services use encryption to protect user information. Researchers may also use crowd-sourcing (e.g., Amazon Mechanical Turk) or third-party annotators (e.g., students in the Lab at University) to manually label video or audio recordings.

In order to protect participants' identities during this study, each participant will be given an alphanumeric participant ID and all collected research data will be labelled according to the participant ID, not by names. We will make no effort to identify participants based on collected audio or video recordings.

We will store raw audio and video data on password protected and secure servers for as long as possible, as we would like other researchers to be able to use this data.

By participating, you understand and agree that data, including audio and video recordings, and information gathered during this study may be used by University and published and/or disclosed by to others outside of . Your name, address, contact information, and other direct personal identifiers will not be included in any publication or dissemination of this research data and/or results by University. Audio and video recordings may be shared for research or publication purposes, but will not include your name or personal information. We will not ask you for any additional permission.

What if I want to refuse or end participation before the study is over?

Taking part in this study is your choice. You can choose to take part, or you can choose not to take part in this study. You also can change your mind at any time. Whatever choice you make will not have any effect on your relationship with University.

If you choose to end participation before the study is over, your data will be deleted. It will not be used for our research or distributed to others for research purposes.

Who should I contact if I have questions?

Please feel free to ask about anything you don't understand.

If you have questions later or if you have a research-related problem, you can contact the Principal Investigator.

If you have questions about your rights as a research participant, or you have complaints about this research, you can call the Institutional Review Boards.

By clicking "Agree to participate in the study" below you are indicating that you: read and understand this consent form and the information presented; agree to participate in this study; and agree to have your face and audio recorded and shared.

☐ I agree to participate in this study.

End of Block: Consent

Start of Block: Check Webcam

By agreeing to participate in this study, you have agreed to have your face recorded via your webcam. We will now check that your webcam is working.

We will also check the quality of your webcam image. A "bounding box" should surround your face in the image on the next page. Once we have captured enough images in which we can detect your face, a message will show informing you of the color of the bounding box so that you can answer the question on the next page.

Please ensure your browser is as large as possible for this survey.

Page Break

What is the color of the bounding box?

A few important notes: If you are prompted that the current site would like to access your camera please click "Allow". If your image does not show, please review your browser settings so that access to your camera is allowed. Please ensure no one else is in the frame. Some objects may incorrectly be detected as faces; if a box surrounds an object other than your face, please remove the object from the frame if possible. Lighting may affect our ability to detect your face. If your face is not bounded by a box below, please check if you have backlighting or other issues that may affect the image.

End of Block: Check Webcam

Start of Block: Check internet speed

Please report your internet speed by running a speed test.

Click this link to open a Google internet speed test: [Speed Test](#).

Then click the blue button labeled "RUN SPEED TEST".

Once the speed test is complete, copy the "Mbps download" value into this text box:

Once the speed test is complete, copy the "Mbps upload" value into this text box:

End of Block: Check internet speed

Start of Block: Demographics

Please complete the following questions regarding demographic and other basic information.

What is your age?

How do you describe your gender?

- ☐ Male
 - ☐ Female
 - ☐ Nonbinary
 - ☐ Prefer not to say
-

In which country did you spend the majority of your childhood?

▼ United States of America ... Zimbabwe

How would you describe your English level?

- ☐ Native speaker
 - ☐ Near native / fluent
 - ☐ Highly proficient
 - ☐ Good command
 - ☐ Basic communication skills
-

What languages, other than English, do you speak?

Are you a student?

☐ Yes

☐ No

Display This Question:

If Are you a student? = Yes

What is your major?

Display This Question:

If Are you a student? = No

What is your occupation?

How often do you...

	Daily	4-6 times a week	2-3 times a week	Once a week	Once a month	Less than once a month
use a computer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
play video games?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
interact with robots?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Have you ever played the video game Space Invaders before?

- ☐ Yes
- ☐ No
- ☐ Not sure

End of Block: Demographics

Start of Block: Visual assessment

Please select the answer that best matches your self-assessment of your visual field and near visual activity.

Because of your vision, do you...

	Not at all	Quite a lot	Very much
have problems crossing a street?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
bump against other people when in crowded areas?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have problems in perceiving a dip on the ground or step?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have problems in reading an article in a newspaper or names/numbers in the telephone directory?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have problems in doing a manual activity such as cooking, sewing, cutting your nails?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Visual assessment

Start of Block: Competitiveness

Please indicate your agreement with the statements below on a 5-pt scale from strongly disagree (1) to strongly agree (5).

	1 (strongly disagree)	2	3 (neither agree nor disagree)	4	5 (strongly agree)
I like competition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a competitive individual.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy competing against an opponent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like competing against other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get satisfaction from competing with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find competitive situations unpleasant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dread competing against other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to avoid competing with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often try to outperform others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Competitiveness

Start of Block: TIPI Personality

Here are a number of personality traits that may or may not apply to you. Please select a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

I see myself as:

	1 (strongly disagree)	2	3	4 (neither agree nor disagree)	5	6	7 (strongly agree)
extraverted, enthusiastic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
critical, quarrelsome.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
dependable, self- disciplined.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
anxious, easily upset.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
open to new experiences, complex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
reserved, quiet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
sympathetic, warm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
disorganized, careless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
calm, emotionally stable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
conventional, uncreative.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: TIPI Personality

Explanation of following survey blocks:

Participants were assigned to one of 3 co-player Identities (AI, Human, Computer) and one of two Orders (Early-First, Late-First). Participants answered the blocks for their Identity condition, in a pre-determined order.

For example, a participant in the AI Identity condition who was in the Late-First Order completed the blocks in the following order:

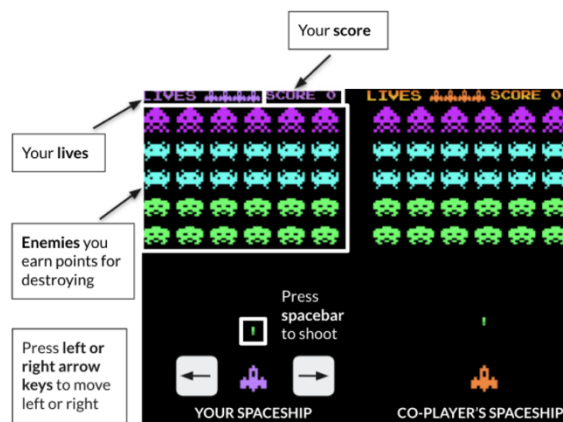
- *Late Cooperative: AI*
- *Late Cooperative questions: AI*
- *Early Cooperative: AI*
- *Early Cooperative questions: AI*
- *Final questions: AI*

The image of the game is identical in all six combinations of Identity and Order, and the instructions are the same within the same identity.

Start of Block: Early Cooperative: AI

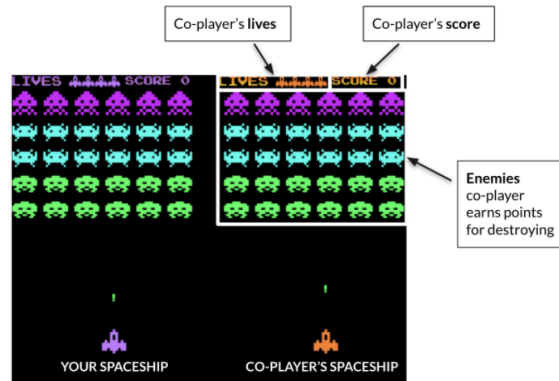
You will play a round of Space Invaders.

You are the **purple ship**, and you start with 4 lives. Use the **left and right arrow keys** to move, and press the **spacebar** to shoot. Your shooting speed is limited, so pressing the spacebar may not always result in a bullet being shot— that's part of the game. **You get points for enemies destroyed on the left half of the screen.**



After the game is over, you will see a 4-character completion code. It may take up to a minute (based on your internet connection) for the code to appear. Please enter this code in the box below the game.

There will be an **orange co-player** in the game, automatically controlled by **artificial intelligence**. The co-player gets points for enemies destroyed on the right half of the screen.



The game will begin on the next page.



Please enter your 4-character completion code below after completing the round. It may take up to a minute (based on your internet connection) for the code to appear. Please do not refresh the page.

Note: this code is just for the box below. It is NOT the survey completion code for your recruitment site (e.g., Prolific)-- you will receive that after completing the rest of the survey.

Part 1: Game Experience

"Game" in the statements below refers to the round of Space Invaders that you just completed.

Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
I enjoyed the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would play this game for fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 2: Co-Player Experience

The "co-player" in the statements below refers to the orange spaceship controlled by artificial intelligence in the game. "Game" refers to the round of Space Invaders that you just completed.

Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
The co-player was helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was proficient at the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was annoying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I liked the behavior of the co-player in the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 3: Co-Player Attributes

How closely would you associate the following words with the co-player that you just played the game with?

	1 (not at all)	2	3	4 (moderate amount)	5	6	7 (very much so)
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassionate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dangerous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aggressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 4: Interaction

Did anything about the behavior of the co-player seem unusual to you?

- ☐ Yes
- ☐ No
- ☐ Not sure

Display This Question:

If Did anything about the behavior of the co-player seem unusual to you? = Yes

Or Did anything about the behavior of the co-player seem unusual to you? = Not sure

Please explain your answer to the question about the behavior of the co-player seeming unusual.

Did you help the co-player?

- ☐ Yes
- ☐ No
- ☐ Not sure

Please explain your answer about if you helped the co-player.

How could the researchers improve the game and/or co-player behavior to make your interaction with the co-player better?

End of Block: Early Cooperative questions: AI

Start of Block: Late Cooperative: AI

See Early Cooperative: AI block for image of game instructions.

Page Break

See Early Cooperative: AI block for image of co-player information.

See Early Cooperative AI block for image of the game.

Please enter your 4-character completion code below after completing the round. It may take up to a minute (based on your internet connection) for the code to appear. Please do not refresh the page.

Note: this code is just for the box below. It is NOT the survey completion code for your recruitment site (e.g., Prolific)-- you will receive that after completing the rest of the survey.

End of Block: Late Cooperative: AI

Start of Block: Late Cooperative questions: AI

Part 1: Game Experience

"Game" in the statements below refers to the round of Space Invaders that you just completed.

Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
I enjoyed the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would play this game for fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 2: Co-Player Experience

The "co-player" in the statements below refers to the orange spaceship controlled by artificial intelligence in the game. "Game" refers to the round of Space Invaders that you just completed.

Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
The co-player was helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was proficient at the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was annoying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I liked the behavior of the co-player in the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 3: Co-player Attributes

How closely would you associate the following words with the co-player that you just played the game with?

	1 (not at all)	2	3	4 (moderate amount)	5	6	7 (very much so)
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassionate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dangerous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aggressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 4: Interaction

Did anything about the behavior of the co-player seem unusual to you?

- ☐ Yes
- ☐ No
- ☐ Not sure
-

Display This Question:

If Did anything about the behavior of the co-player seem unusual to you? = Yes

Or Did anything about the behavior of the co-player seem unusual to you? = Not sure

Please explain your answer to the question about the behavior of the co-player seeming unusual.

Did you help the co-player?

- ☐ Yes
- ☐ No
- ☐ Not sure

Please explain your answer about if you helped the co-player.

How could the researchers improve the game and/or co-player behavior to make your interaction with the co-player better?

End of Block: Late Cooperative questions: AI

Start of Block: Final questions: AI

You played with co-players with different behaviors in the two rounds of Space Invaders.

Did you notice a difference in the co-player's behavior between Round 1 and Round 2?

- ☐ Yes
- ☐ No
- ☐ Not sure
-

Display This Question:

If Did you notice a difference in the co-player's behavior between Round 1 and Round 2? = Yes

Or Did you notice a difference in the co-player's behavior between Round 1 and Round 2? = Not sure

What was the difference in the co-player's behavior between Round 1 and Round 2 that you noticed?

Page Break

You experienced two different behaviors for the orange co-player in the game:

- Early behavior: The co-player came to the left side to help destroy enemies on the left before all enemies on the right were destroyed.
- Late Behavior: the co-player waited to come to the left side to help destroy enemies on the left until after all enemies on the right were destroyed.

Remember: you only received points for enemies destroyed on the left.

Please identify which behavior you think the co-player exhibited in each of the two rounds you played:

	Early behavior	Late behavior	Unsure / do not remember
Round 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Round 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which co-player behavior did you prefer (by round)?

- ☐ Round 1
- ☐ Round 2
- ☐ Did not prefer one over the other

Please explain your answer for which co-player behavior you preferred.

Did you go over to the right side of the game screen at all?

- ☐ Yes: in Round 1 and Round 2
- ☐ Yes: only in Round 1
- ☐ Yes: only in Round 2
- ☐ No

Please explain why you went to the right side of the game or not.

Page Break

This study is collecting video data to study if facial reactions can be used by computer agents to recognize whether users like their interactions with them. However, not everybody expresses emotions the same way via their face. Thus, below we ask you to complete the Berkeley expressivity questionnaire to measure your level of expressivity. Completing this questionnaire will allow us to better understand the video data collected during the study, but is optional.

For each statement below, please indicate your agreement or disagreement on a scale from 1 (strongly disagree) to 7 (strongly agree):

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
Whenever I feel positive emotions, people can easily see exactly what I am feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes cry during sad movies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People often do not know what I am feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I laugh out loud when someone tells me a joke that I think is funny	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is difficult for me to hide my fear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm happy, my feelings show	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My body reacts very strongly to emotional situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've learned it is better to suppress my anger than to show it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

No matter
how
nervous or
upset I am,
I tend to
keep a
calm
exterior
I am an
emotionally
expressive
person
I have
strong
emotions
I am
sometimes
unable to
hide my
feelings,
even
though I
would like
to
Whenever
I feel
negative
emotions,
people can
easily see
exactly
what I am
feeling
There have
been times
when I
have not
been able
to stop
crying
even
though I
tried to
stop
I
experience
my
emotions
very
strongly

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What I'm
feeling is
written all
over my
face



Page Break

Do you have any suggestions to improve gameplay? Did you notice any issues ("bugs") during the game?

If you felt that you experienced any lag issues or bugs with the game and are willing to provide any information about your computer (e.g., year, model), please do so below:

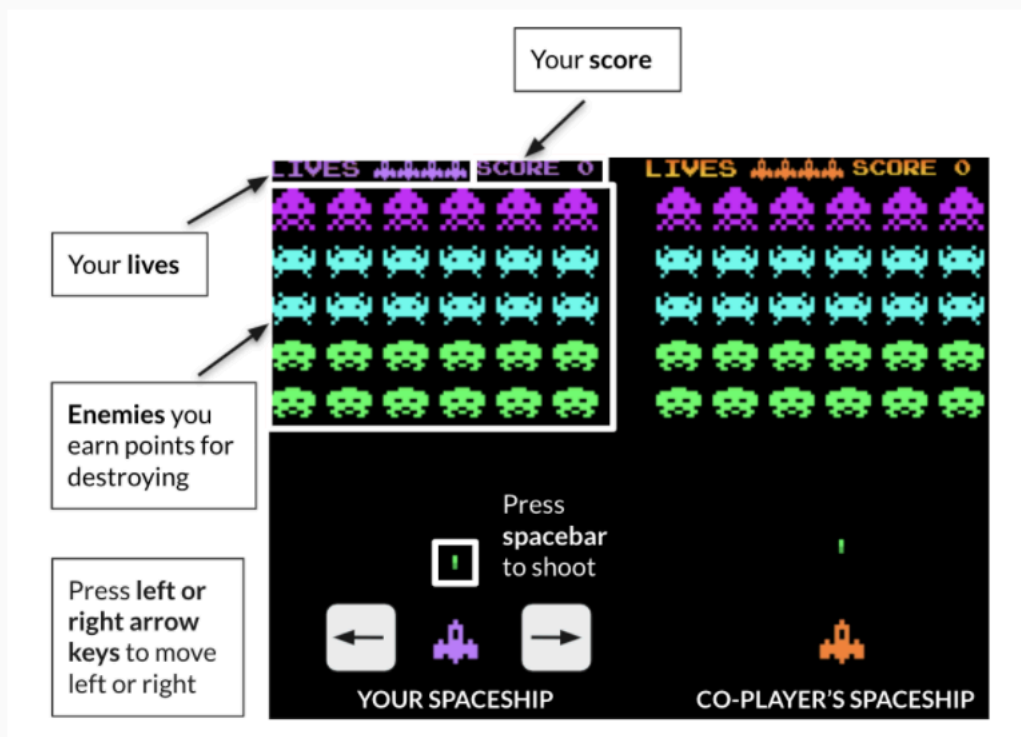
Anything else you'd like to share?

End of Block: Final questions: AI

Start of Block: Early Cooperative: Human

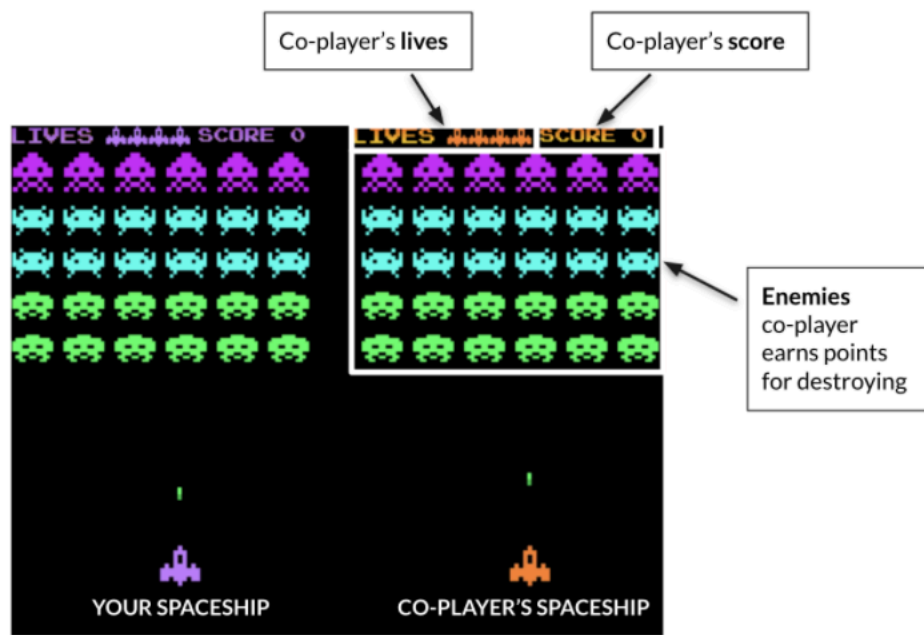
You will play a round of Space Invaders.

You are the **purple ship**, and you start with 4 lives. Use the **left and right arrow keys** to move, and press the **spacebar** to shoot. Your shooting speed is limited, so pressing the spacebar may not always result in a bullet being shot— that's part of the game. **You get points for enemies destroyed on the left half of the screen.**



After the game is over, you will see a 4-character completion code. It may take up to a minute (based on your internet connection) for the code to appear. Please enter this code in the box below the game.

There will be an **orange co-player** in the game, controlled by another **human**. The co-player gets points for enemies destroyed on the right half of the screen.



The game will begin on the next page.



Please enter your 4-character completion code below after completing the round. It may take up to a minute (based on your internet connection) for the code to appear. Please do not refresh the page.

Note: this code is just for the box below. It is NOT the survey completion code for your recruitment site (e.g., Prolific)-- you will receive that after completing the rest of the survey.

End of Block: Early Cooperative: Human

Start of Block: Early Cooperative questions: Human

Part 1: Game Experience

"Game" in the statements below refers to the round of Space Invaders that you just completed.



Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
I enjoyed the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would play this game for fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 2: Co-Player Experience

The "co-player" in the statements below refers to the orange spaceship controlled by another human in the game. "Game" refers to the round of Space Invaders that you just completed.



Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
The co-player was helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was proficient at the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was annoying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I liked the behavior of the co-player in the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 3: Co-Player Attributes

How closely would you associate the following words with the co-player that you just played the game with?

	1 (not at all)	2	3	4 (moderate amount)	5	6	7 (very much so)
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassionate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dangerous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aggressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 4: Interaction

Did anything about the behavior of the co-player seem unusual to you?

- ☐ Yes
- ☐ No
- ☐ Not sure

Display This Question:

If Did anything about the behavior of the co-player seem unusual to you? = Yes

Or Did anything about the behavior of the co-player seem unusual to you? = Not sure

Please explain your answer to the question about the behavior of the co-player seeming unusual.

Did you help the co-player?

- ☐ Yes
- ☐ No
- ☐ Not sure

Please explain your answer about if you helped the co-player.

How could the researchers improve the game and/or co-player behavior to make your interaction with the co-player better?

End of Block: Early Cooperative questions: Human

Start of Block: Late Cooperative: Human

See Early Cooperative: Human block for image of game instructions.

Page Break

See Early Cooperative: Human block for image of co-player information.

See Early Cooperative Human block for image of the game.

Please enter your 4-character completion code below after completing the round. It may take up to a minute (based on your internet connection) for the code to appear. Please do not refresh the page.

Note: this code is just for the box below. It is NOT the survey completion code for your recruitment site (e.g., Prolific)-- you will receive that after completing the rest of the survey.

End of Block: Late Cooperative: Human

Start of Block: Late Cooperative questions: Human

Part 1: Game Experience

"Game" in the statements below refers to the round of Space Invaders that you just completed.

Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
I enjoyed the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would play this game for fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 2: Co-Player Experience

The "co-player" in the statements below refers to the orange spaceship controlled by another human in the game. "Game" refers to the round of Space Invaders that you just completed.

Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
The co-player was helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was proficient at the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was annoying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I liked the behavior of the co-player in the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 3: Co-player Attributes

How closely would you associate the following words with the co-player that you just played the game with?

	1 (not at all)	2	3	4 (moderate amount)	5	6	7 (very much so)
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassionate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dangerous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aggressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 4: Interaction

Did anything about the behavior of the co-player seem unusual to you?

- ☐ Yes
- ☐ No
- ☐ Not sure

Display This Question:

If Did anything about the behavior of the co-player seem unusual to you? = Yes

Or Did anything about the behavior of the co-player seem unusual to you? = Not sure

Please explain your answer to the question about the behavior of the co-player seeming unusual.

Did you help the co-player?

- ☐ Yes
- ☐ No
- ☐ Not sure

Please explain your answer about if you helped the co-player.

How could the researchers improve the game and/or co-player behavior to make your interaction with the co-player better?

End of Block: Late Cooperative questions: Human

Start of Block: Final questions: Human

You played with co-players with different behaviors in the two rounds of Space Invaders.

Did you notice a difference in the co-player's behavior between Round 1 and Round 2?

- ☐ Yes
- ☐ No
- ☐ Not sure
-

Display This Question:

If Did you notice a difference in the co-player's behavior between Round 1 and Round 2? = Yes

Or Did you notice a difference in the co-player's behavior between Round 1 and Round 2? = Not sure

What was the difference in the co-player's behavior between Round 1 and Round 2 that you noticed?

Page Break

You experienced two different behaviors for the orange co-player in the game:

- Early behavior: The co-player came to the left side to help destroy enemies on the left before all enemies on the right were destroyed.

- Late Behavior: the co-player waited to come to the left side to help destroy enemies on the left until after all enemies on the right were destroyed.

Remember: you only received points for enemies destroyed on the left.

Please identify which behavior you think the co-player exhibited in each of the two rounds you played:

	Early behavior	Late behavior	Unsure / do not remember
Round 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Round 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which co-player behavior did you prefer (by round)?

- ☐ Round 1
- ☐ Round 2
- ☐ Did not prefer one over the other
-

Please explain your answer for which co-player behavior you preferred.

Did you go over to the right side of the game screen at all?

- ☐ Yes: in Round 1 and Round 2
- ☐ Yes: only in Round 1
- ☐ Yes: only in Round 2
- ☐ No
-

Please explain why you went to the right side of the game or not.

Page Break

This survey originally suggested that you were interacting with another human in the virtual environment. However, the other agent was controlled automatically by a computer program. We could not tell you this before because the research team is interested in observing your reactions to the other agent's actions and studying whether these reactions differ when players believe that the other agent is controlled by a human versus a computer, or between different humans (e.g., between genders). We understand, though, if you wish to withdraw from the study at this point because you did not play the game with a real human. If that is the case, we will delete all your data; otherwise, we will use your responses and recordings to help advance human-agent interaction. Either way, you will get paid as promised for completing this survey.

Do you wish to continue being a participant in the study or would you prefer to withdraw your participation at this point?

- ☐ Yes, I would like to continue being a participant.
- ☐ No, I would like to withdraw from the study and for all my data to be deleted.

End of Block: Final questions: Human

Start of Block: Final questions: Human continued

Does the fact that the co-player was actually controlled by a computer affect your perception of the co-player?

- ☐ Yes, I like the co-player more after knowing that it was controlled by a computer.
- ☐ Yes, I like the co-player less after knowing that it was controlled by a computer.
- ☐ No

Page Break

This study is collecting video data to study if facial reactions can be used by computer agents to recognize whether users like their interactions with them. However, not everybody expresses emotions the same way via their face. Thus, below we ask you to complete the Berkeley expressivity questionnaire to measure your level of expressivity. Completing this questionnaire will allow us to better understand the video data collected during the study, but is optional.

For each statement below, please indicate your agreement or disagreement on a scale from 1 (strongly disagree) to 7 (strongly agree):

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
Whenever I feel positive emotions, people can easily see exactly what I am feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes cry during sad movies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People often do not know what I am feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I laugh out loud when someone tells me a joke that I think is funny	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is difficult for me to hide my fear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm happy, my feelings show	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My body reacts very strongly to emotional situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've learned it is better to suppress my anger than to show it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

No matter
how
nervous or
upset I am,
I tend to
keep a
calm
exterior
I am an
emotionally
expressive
person
I have
strong
emotions
I am
sometimes
unable to
hide my
feelings,
even
though I
would like
to
Whenever
I feel
negative
emotions,
people can
easily see
exactly
what I am
feeling
There have
been times
when I
have not
been able
to stop
crying
even
though I
tried to
stop
I
experience
my
emotions
very
strongly

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What I'm
feeling is
written all
over my
face



Page Break

Do you have any suggestions to improve gameplay? Did you notice any issues ("bugs") during the game?

If you felt that you experienced any lag issues or bugs with the game and are willing to provide any information about your computer (e.g., year, model), please do so below:

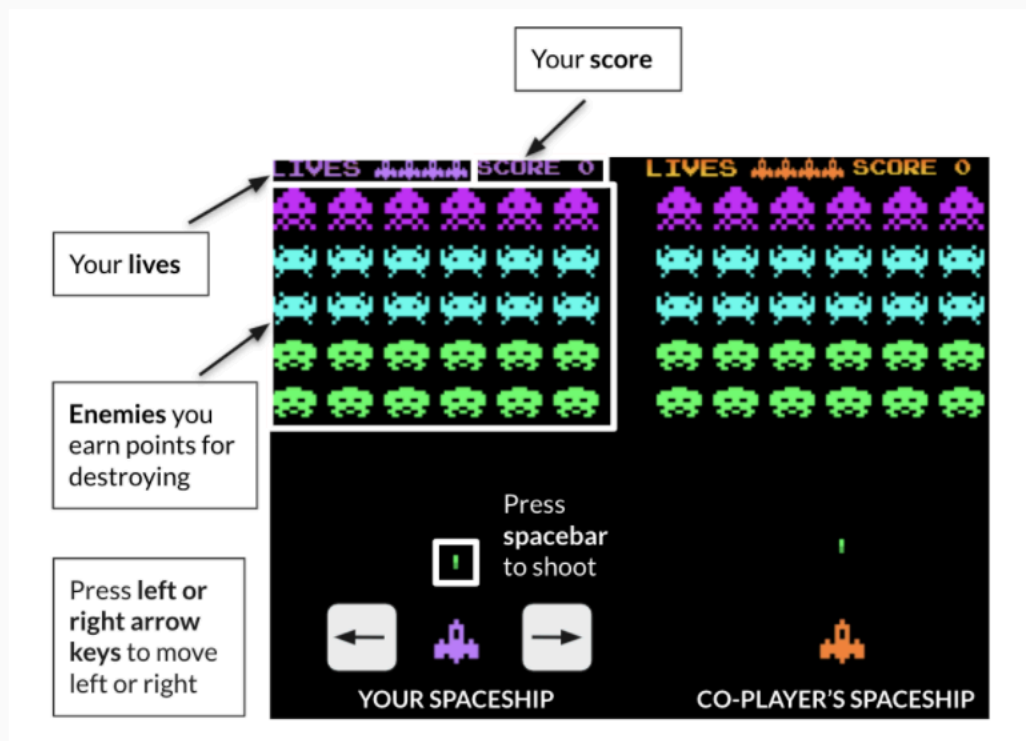
Anything else you'd like to share?

End of Block: Final questions: Human continued

Start of Block: Early Cooperative: Computer

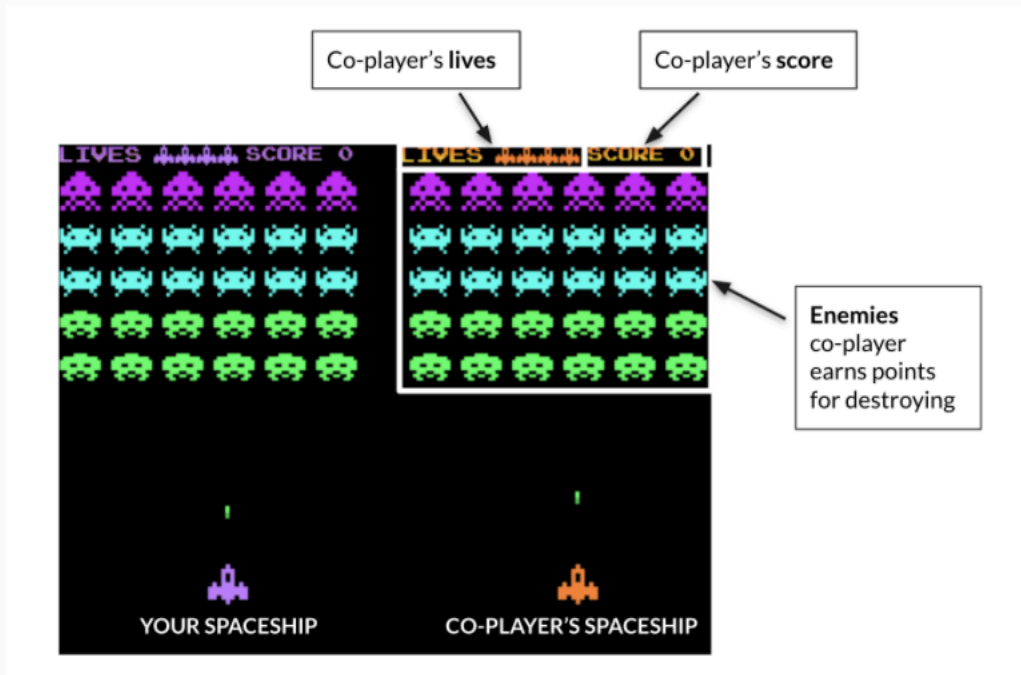
You will play a round of Space Invaders.

You are the **purple ship**, and you start with 4 lives. Use the **left and right arrow keys** to move, and press the **spacebar** to shoot. Your shooting speed is limited, so pressing the spacebar may not always result in a bullet being shot— that's part of the game. **You get points for enemies destroyed on the left half of the screen.**



After the game is over, you will see a 4-character completion code. It may take up to a minute (based on your internet connection) for the code to appear. Please enter this code in the box below the game.

There will be an **orange co-player** in the game, automatically controlled by a **computer**. The co-player gets points for enemies destroyed on the right half of the screen.



The game will begin on the next page.



Please enter your 4-character completion code below after completing the round. It may take up to a minute (based on your internet connection) for the code to appear. Please do not refresh the page.

Note: this code is just for the box below. It is NOT the survey completion code for your recruitment site (e.g., Prolific)-- you will receive that after completing the rest of the survey.

End of Block: Early Cooperative: Computer

Start of Block: Early Cooperative questions: Computer

Part 1: Game Experience

"Game" in the statements below refers to the round of Space Invaders that you just completed.



Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
I enjoyed the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would play this game for fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 2: Co-Player Experience

The "co-player" in the statements below refers to the orange spaceship automatically controlled by a computer in the game. "Game" refers to the round of Space Invaders that you just completed.



Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
The co-player was helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was proficient at the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was annoying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I liked the behavior of the co-player in the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 3: Co-Player Attributes

How closely would you associate the following words with the co-player that you just played the game with?

	1 (not at all)	2	3	4 (moderate amount)	5	6	7 (very much so)
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassionate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dangerous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aggressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 4: Interaction

Did anything about the behavior of the co-player seem unusual to you?

- ☐ Yes
- ☐ No
- ☐ Not sure
-

Display This Question:

If Did anything about the behavior of the co-player seem unusual to you? = Yes

Or Did anything about the behavior of the co-player seem unusual to you? = Not sure

Please explain your answer to the question about the behavior of the co-player seeming unusual.

Did you help the co-player?

- ☐ Yes
- ☐ No
- ☐ Not sure

Please explain your answer about if you helped the co-player.

How could the researchers improve the game and/or co-player behavior to make your interaction with the co-player better?

End of Block: Early Cooperative questions: Computer

Start of Block: Late Cooperative: Computer

See Early Cooperative: Computer block for image of game instructions.

Page Break

See Early Cooperative: Computer block for image of co-player information.

Page Break

See Early Cooperative Computer block for image of the game.

Please enter your 4-character completion code below after completing the round. It may take up to a minute (based on your internet connection) for the code to appear. Please do not refresh the page.

Note: this code is just for the box below. It is NOT the survey completion code for your recruitment site (e.g., Prolific)-- you will receive that after completing the rest of the survey.

End of Block: Late Cooperative: Computer

Start of Block: Late Cooperative questions: Computer

Part 1: Game Experience

"Game" in the statements below refers to the round of Space Invaders that you just completed.

Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
I enjoyed the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The game was boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would play this game for fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 2: Co-Player Experience

The "co-player" in the statements below refers to the orange spaceship automatically controlled by a computer in the game. "Game" refers to the round of Space Invaders that you just completed.



Please rate the statements on a scale from 1 (strongly disagree) to 7 (strongly agree) depending on how much you agree with them.

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
The co-player was helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was proficient at the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The co-player was annoying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I liked the behavior of the co-player in the game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 3: Co-player Attributes

How closely would you associate the following words with the co-player that you just played the game with?

	1 (not at all)	2	3	4 (moderate amount)	5	6	7 (very much so)
Happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassionate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledgeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awkward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dangerous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Awful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aggressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Part 4: Interaction

Did anything about the behavior of the co-player seem unusual to you?

- ☐ Yes
- ☐ No
- ☐ Not sure

Display This Question:

If Did anything about the behavior of the co-player seem unusual to you? = Yes

Or Did anything about the behavior of the co-player seem unusual to you? = Not sure

Please explain your answer to the question about the behavior of the co-player seeming unusual.

Did you help the co-player?

- ☐ Yes
- ☐ No
- ☐ Not sure
-

Please explain your answer about if you helped the co-player.

How could the researchers improve the game and/or co-player behavior to make your interaction with the co-player better?

End of Block: Late Cooperative questions: Computer

Start of Block: Final questions: Computer

You played with co-players with different behaviors in the two rounds of Space Invaders.

Did you notice a difference in the co-player's behavior between Round 1 and Round 2?

- ☐ Yes
- ☐ No
- ☐ Not sure
-

Display This Question:

If Did you notice a difference in the co-player's behavior between Round 1 and Round 2? = Yes

Or Did you notice a difference in the co-player's behavior between Round 1 and Round 2? = Not sure

What was the difference in the co-player's behavior between Round 1 and Round 2 that you noticed?

Page Break

You experienced two different behaviors for the orange co-player in the game:

- Early behavior: The co-player came to the left side to help destroy enemies on the left before all enemies on the right were destroyed.

- Late Behavior: the co-player waited to come to the left side to help destroy enemies on the left until after all enemies on the right were destroyed.

Remember: you only received points for enemies destroyed on the left.

Please identify which behavior you think the co-player exhibited in each of the two rounds you played:

	Early behavior	Late behavior	Unsure / do not remember
Round 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Round 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which co-player behavior did you prefer (by round)?

- ☐ Round 1
- ☐ Round 2
- ☐ Did not prefer one over the other
-

Please explain your answer for which co-player behavior you preferred.

Did you go over to the right side of the game screen at all?

- ☐ Yes: in Round 1 and Round 2
- ☐ Yes: only in Round 1
- ☐ Yes: only in Round 2
- ☐ No
-

Please explain why you went to the right side of the game or not.

Page Break

This study is collecting video data to study if facial reactions can be used by computer agents to recognize whether users like their interactions with them. However, not everybody expresses emotions the same way via their face. Thus, below we ask you to complete the Berkeley expressivity questionnaire to measure your level of expressivity. Completing this questionnaire will allow us to better understand the video data collected during the study, but is optional.

For each statement below, please indicate your agreement or disagreement on a scale from 1 (strongly disagree) to 7 (strongly agree):

	1 (strongly disagree)	2	3	4 (neutral)	5	6	7 (strongly agree)
Whenever I feel positive emotions, people can easily see exactly what I am feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes cry during sad movies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People often do not know what I am feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I laugh out loud when someone tells me a joke that I think is funny	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is difficult for me to hide my fear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm happy, my feelings show	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My body reacts very strongly to emotional situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I've
learned it
is better to
suppress
my anger
than to
show it

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

No matter
how
nervous or
upset I am,
I tend to
keep a
calm
exterior

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

I am an
emotionally
expressive
person

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

I have
strong
emotions

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

I am
sometimes
unable to
hide my
feelings,
even
though I
would like
to

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Whenever
I feel
negative
emotions,
people can
easily see
exactly
what I am
feeling

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

There have been times when I have not been able to stop crying even though I tried to stop

I experience my emotions very strongly

What I'm feeling is written all over my face

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Do you have any suggestions to improve gameplay? Did you notice any issues ("bugs") during the game?

If you felt that you experienced any lag issues or bugs with the game and are willing to provide any information about your computer (e.g., year, model), please do so below:

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Anything else you'd like to share?

End of Block: Final questions: Computer
