OIST ECSU

Experiment Information

Duorhythm Experiment

2411221408

Experiment	Duorhythm Experiment
Principal Investigator	Tom Froese
Lead Researcher	Finda Dwi Putri
Experimenter(s)	Loh Chen Lam, Tae Morrissey, Brian Morrissey, Stephen Estelle, Shannon Reiko Hayashi, Kazuma Takada, Mariana Ganzerla Casagrande, Alexander Michael Hoelken
Experimental equipment	EEG, Dualsense™ Controller

Dear Participant,

Thank you for agreeing to participate in this study! Before you begin, it is important that you learn about the procedures involved. Please read the following carefully.

Our goals

The goal of this study is to investigate how brain rhythms synchronize when people cooperate to complete a game. To avoid behavioral bias, we cannot describe the specific research questions and hypotheses prior to the experiment. However, once you have completed the experiment, you will be debriefed.

Instructions and procedures

You and your partner will participate in a cooperative two-person experiment. The main part of the experiment takes place in a video game. You will interact with the game by viewing the scene on a computer monitor and pressing buttons on a controller. In this game, you will control a crosshair to shoot circles. Depending on the color of the circle, you and your partner will need to shoot differently to obtain high scores.

During the experiment, you and your partner will sit in different rooms.

The whole experiment consists of a resting phase, tutorial, experiment trials and questionnaires. You will need to answer the questionnaires both before and after the experiment. The questions will be about your demographics (age, gender), rough duration of acquaintance with your partner, comfort with game and video display, and experience during the game. Note that all the answers you provide will be anonymised, and used exclusively for data analysis.

Throughout the experiment, you and your partner will be wearing a set of non-invasive sensors to measure brain activity (EEG). The details of the devices used in the entire experiment can be found in **Equipment Information**.

You will see more detailed instructions on a separate instruction sheet once you begin the experiment and there will be a tutorial so you can familiarise yourself with the experimental interface.

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Time involvement

The experiment takes approximately 2.5 hours.

Compensation

You will receive ¥3500 in the form of Amazon gift card. If for any reason the experiment could not be completed, you will receive hourly compensation.

Risks and benefits

Physiological recordings used in this study are generally low risk to the participants. The risks involved such as the discomfort of wearing an EEG cap and potential skin infection if there is any open or unhealed wound. The risk of infection will be minimized by sanitizing the skin surface and the equipment. In the unlikely event of sudden allergic reactions to experimental equipment, the recording will be aborted. If the participant comes from off campus, the transportation fee will not be covered.

Further explanations

Please contact us at the following address as needed.

To schedule or opt-out of the experiment: Tae Morrissey, tae.morrissey@oist.jp

If you would like more information about this study: Finda Putri, finda.putri@oist.jp

If you have concerns about the study: Tom, Principal Investigator: Tom Froese, tom.froese@oist.jp