**Information letter for the HRI Dance experiment**

concerning the user evaluation for the course Human-Robot Interaction

*Robot interaction with voice and gestural interface*

This usability and user experience study is conducted within the first-year master course Human-Robot Interaction of the Artificial Intelligence Master’s Program of the Radboud University. In this course, students conduct an experiment to test the usability and user experience of interacting with a robot.

Within this course, we conduct a study to evaluate the usability and user experience of 2 interface being gestural and voice commands to interact with a (virtual) robot. The commands the participant has to instruct the robot with are the names of dance moves or poses which the robot has to perform.

We want to study whether people like it better to interact with a robot by imitation (gestures) or talking (voice commands) and compare between interfaces how fast people manage to get the robot to perform the dance moves.

You will instruct the dance moves to the robot for both interfaces. The instructor will tell you which interface you will start with. First, you will do 3 practice trials to familiarize you with the assignment and dance moves which are used. Then you will do 10 trials with a break of 5 seconds between each trial. During a trial you instruct the robot to complete a sequence of dance moves. The sequence is 4 dance moves long and will be randomly selected. All dance moves are always displayed and numbers from 1 to 4 will indicate which moves have to be performed in which order. After you finished 10 trials for the first interface you will have a short break of 10 seconds. This will be indicated on the screen and the break will end automatically. After the break you will do what is described above again but for the other interface. The total number of trials for both experiments and practice sessions summed will be 26 trials.

After the experiment you will fill in a questionnaire on the computer. It will start after you finished the last trial. This questionnaire will ask you about yourself and about your experiences during the trial. The experiment will take approximately 15 minutes.

During the study you can indicate at any moment in time that you want to quit participating, without having to explain why you quit. Quitting during the study has no consequences whatsoever.

The information that we collect will be anonymously processed. This means that the results cannot be traced back to you. The consequence of this is that we cannot inform you about your personal results after the study has been completed. However, we could inform you about the total results of the study. If you wish to be informed about the results, then please let us know.

Did this study unintentionally prompt unpleasant feelings, thoughts, or insecurities for you? Then, please contact the study advisor or the student psychologist for an appointment.

If, after the study, you have remarks or complaints about our study, you can contact the general coordinator of the course Introduction Human-Computer Interaction, Hanna Schraffenberger (h.schraffenberger@ru.nl). She will then invite you as soon as possible for a personal conversation.

Possible questions you have as a result of this information, you can ask now. You can also still ask questions if you really don’t know what to do during the experiment.

Now, we ask you to think about whether you want to participate in our study.

You are of course free to decide that you do not want to participate in this study. In that case we thank you for time.

If you indicate that you want to participate in this study, we will ask you to sign an informed consent form. By signing this form, you indicate that you are sufficiently informed about the study and that you want to participate in the study and that you voluntarily do so.

Kind regards,

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