## THE ELIZABETH RUTHERFORD MEMORIAL





## Instructions for Experimeners on How to Use the Talking Heads General Dual Probe Task Software Packages

Please find below the critical points you need to know BEFORE using the tasks in your research.

These points cover information about running the task, considerations during task administration, accessing saved data, the data dictionary, and more.

- 1. Currently, two versions of the Talking Heads General Dual Probe Task Packages are available for download on the <u>CARE website</u>:
  - The version that includes mood ratings before the first block and immediately after each block of the task.
  - The version without mood ratings.
- 2. After downloading the task file, unzip it. It is important to not remove or modify any folders or files within the downloaded package, including avoiding renaming any files or folders.
- 3. The task requires a Windows operating system for running. Please note that it is not compatible with Apple or Linux systems.
- 4. Please ensure that the keyboard used for testing is equipped with a 3 x 3 number pad. The numeric keys located at the top row of the main part of the keyboard could not be used for testing.
- 5. The task software is designed to be compatible with different screen resolutions for seamless execution. However, if you encounter any difficulties running the software, please set your monitor resolution to 1920 x 1080 for optimal performance.

- 6. To ensure clear visibility of the probes, it is crucial to check and adjust the lighting conditions necessary for testing. Please adjust the screen brightness and, if possible, the room lighting to ensure the probes are visible to participants. If you are using multiple computers for testing, please ensure that the screen brightness is consistent across all screens.
- 7. To ensure accurate recording of participants' responses, please check that the Num Lock on the keyboard is enabled. It is essential to check this both for the practice task and immediately before starting the main task, as there are occasional instances where participants unintentionally turn off the Num Lock, although this is rare (but needs to be checked).
- 8. Please ensure that the volume level for the videos is appropriately adjusted on all computers used for testing, neither too high nor too low. We recommend asking participants about their experience with the volume immediately after completing the practice task, as they may not proactively raise the issue before the main task begins, potentially causing disruptions during the task.
- 9. Due to the audio for each video being played through the corresponding headphone (the audio of the right video through the right headphone and the left video through the left headphone), it is crucial to ensure that the participant is wearing the headphones correctly. Please verify that the right pad is placed on the right ear and the left pad on the left ear, as the video and audio switches are synchronized.
- 10. To replicate the administrative process of the original talking heads study, follow these criteria for the practice task, which consists of four parts:
  - 1. Demo of Probes
  - 2. Demo of Briefly Presented Probes
  - 3. Demo of Mood Rating (in the version of the task that includes mood rating)
  - 4. Video Viewing and Probe Detection Practice

After the practice parts involving probe detection, the percentage of probe response accuracy will be presented. To ensure participants have understood how to accurately respond to probes, the first two probe demo parts can be repeated. The researcher can press Space to proceed if the probe response accuracy is satisfactory

(at least 75%), or press Enter to repeat that section if the probe accuracy percentage is below 75%. Please note that no data will be recorded from the practice task.

- 11. Upon initiating the main task, a prompt "ENTER DATA FILE CODE?" will appear, requiring you to enter a code for each participant. It is crucial to avoid using the same code for multiple participants, as the program will overwrite the data of subsequent participants onto previous data. To prevent this issue, we strongly recommend implementing a naming system that incorporates the participant number, testing date, and potentially the participant's gender and/or initials. By adopting this method, such as using P61M0703 (which signifies the 61st participant, Male, tested on 7th March), the likelihood of duplicating codes and encountering data loss is minimized.
- 12. Please note that it is important for you to remain present with the participant during the demo and practice session of the task until they are instructed to start the main task. Additionally, ensure that participants can communicate with you when they have completed the task or encountered any unexpected issues.
- 13. It is important to note that if the task is quit prematurely before completion, NO data will be stored. Therefore, it is crucial to allow the task to run until the end to ensure data storage. Once the task is finished (indicated by "THANK YOU VERY MUCH. THIS PART OF THE EXPERIMENT IS NOW COMPLETE" on the screen), you need to use Alt + F4 to exit and the data will be saved. You can use Alt + F4 to exist before the task is completed too, but as mentioned no data will be stored for that session.
- 14. Upon completion of the main task, a data file will be generated and saved in the "Data Files" folder within the same directory as the task. However, before you can analyze the data, it is necessary to convert the .BBC files to .csv format. To perform this conversion, please use the provided R scripts available on the website named <code>BBCtoCSV\_for\_Talking\_Heads\_Task</code>, and <code>BBCtoCSV\_for\_Mood\_Ratings</code>, for the Probe Dectection and the Mood Ratings data, respectively. To convert the files, the R script and your data needs to be in the same folder. If you are using the version of the task that includes Mood Ratings, you will find two data files for each participant: one for their mood rating scores and another for their probe detection data. To convert the .BBC files to .csv format, it is necessary to move (or copy and paste) the BBC files related to mood ratings and probe data into separate folders. Then, ensure that the corresponding R script is placed in each respective folder. To convert the data into .csv, open each R script one

by one, select all the code by pressing Ctrl + A, and then execute the script by clicking "Run" or pressing Ctrl + Enter. This process will swiftly convert your data into .csv files within few seconds. Please avoid making any modifications to the code and use it exactly as provided.

- 15. You can import the .csv data files into R or SPSS for further analysis and tests. An R script that facilitates data wrangling and computation of attention bias scores and other variables for both versions of the task will be made available for download soon.
- 16. To know what each column of the data files means, please see the below data dictionary tables:

The column names for the probe detection data and what each column data show:

Column names	What the values show
subjectid	This column shows the Unique code entered for participant
video_name	Records the video names in the order they presented in the task
probe_time	the time (in milliseconds) when probes are presented in the video
probe_left	the identity of the probe presented at the left side of the screen
probe_right	the identity of the probe presented at the right side of the screen
response	the response that the participant made (if missing, * will be shown)
RT	the reaction time (in milliseconds) when participant made their response
condition	The three first letter show the location and gender of the negative talking head in each dual video. For example, NLF show the negative video was at left and was female. The last letter shows the topic of the video, with H for Health, S for Safety and security, I for social Interactions, A for Appearance, P for Performance, and C for situational Control.

Data dictionary table for the Mood Rating Data:

Column name	What the values show
subjectid	This column show the Unique code entered for participant
items	Shows the mood participants was asked to rate
assess_1 to assess_7	Show the scores for each mood with the range from 0 to 100 with higher scores showing higher intensity of mood

If you had any question about the above instructions or the task in general, please don't hesitate to contact me via the email <a href="mailto:mazidisharafabadi@uwa.edu.au">mahdi.mazidisharafabadi@uwa.edu.au</a>