

## INFORMATION SHEET

### Remote Research and Development project

We invite you to take part in this remote research and development (R&D) study to help us develop remote training in the use of our platform. However, it is not expected or required of you to participate. You are free to decline, or to withdraw from taking part at any time, without having to give a reason or suffering any adverse consequence.

#### **The Purpose of this Study**

BrainWaveBank Ltd have developed a new system to monitor brain health at home through the use of a wireless EEG (electroencephalography, or “brainwave” recording) headset combined with mobile/tablet games.

Up until now, we have always started with an in-person training session, to familiarize the individual in the proper use of our equipment and perform some cognitive tests. With the arrival of Covid-19, the need for a face-to-face meeting may make it more difficult for people to start using our system, so we want to evaluate a new method of remote training. We are looking for healthy adults to help us trial this new procedure as part of a fully remote R&D project.

#### **The Role of the Participant**

You will learn to use our technology and complete cognitive tests while being supported by a researcher. Your communication will be by remote means such as email, telephone and video-conferencing software. First, a researcher will guide you through measuring your head circumference in a certain way. You will then receive a headset (sized to your measurements), electronic tablet and accessories delivered to your address. You will hold this equipment until the end of the study and then return it. A researcher will schedule a video meeting to support you as you learn how to use the headset and tablet-based app to complete games and tasks. In the two weeks following, you will be asked to complete several sessions using the BrainWaveBank equipment. After this, we will contact you again to obtain your feedback on your experience. We will make audiovisual (AV) recordings of the remote meetings. We will also record behavioural (reaction times, accuracy) and EEG data when you use the BrainWaveBank platform. We will analyse the AV, behavioural and EEG data to help us evaluate this novel training method. You will receive and return the equipment needed to take part via a door-to-door courier service which we will arrange.

#### **What is EEG?**

EEG stands for electroencephalography which is simply, "brainwave" technology. EEG is a cheap, safe recording technology which is widely used in hospitals and universities. The technology has existed for over a century now, and it works by simply measuring the tiny electrical signals that reach your scalp from your brain's natural activity. Advances in technology (mobile communication, dry sensor designs and miniaturization) now mean that EEG is available as a consumer product for everyday use in the home. The EEG signals that



are collected using our headset are securely transmitted to the tablet using Bluetooth technology. From the tablet, the data is then encrypted and transferred to our secure servers via WiFi connection. All data collected using the platform is anonymised.

### **Can I sign up to take part?**

You can sign up if:

- ✓ **You are aged 55+ years old**
- ✓ **You are resident in Northern Ireland**
- ✓ **You are a fluent speaker of English**
- ✓ **You have Wi-Fi in your home**
- ✓ **You have access to a laptop/desktop PC or Apple iPad in your home**
- ✓ **You have normal or corrected-to-normal vision**

Unfortunately we can't enrol everyone in this study who might like to participate. You will be unable to participate if:

- × **You have participated in a BrainWaveBank study before**
- × **You have a current or past history of a neurological, psychiatric, movement or neurodegenerative condition which affects the central nervous system (e.g. MS, epilepsy/seizures, depression or Parkinson's disease)**

Please evaluate yourself whether you qualify. If not, remember that you do not need to reveal to us the reason that you are not eligible.

### **What To Expect**

#### **Training session – 3 hrs 30 mins (including time for breaks)**

Once you receive delivery of a headset, electronic tablet and accessories, a researcher will set up a remote meeting. You will communicate with the researcher through Skype, on the tablet provided. He/she will guide you through training to use the BrainWaveBank headset and tablet-based app. The training session may be recorded so that the researcher can review the footage later and note which parts of the test worked well and which didn't.

Firstly, the researcher will guide you through a series of standard tests designed to measure baseline cognitive function. It is important to note that we are only doing these tests for research purposes, and that the researcher cannot offer medical advice or diagnose any underlying conditions. Our primary interest is in assessing the feasibility of the remote testing procedure, and we will delete/destroy your scores after the session is finished. The tests will last approximately one hour and thirty minutes with time for breaks.

The cognitive tests we will use are designed to test memory and awareness. Some of these tasks may seem very easy, while others may be more challenging.

Pen-and-paper tests: The researcher will explain how to use materials that you will receive in advance by post. The researcher will check that you can see and hear them clearly as they ask questions and show you images on screen.

Computerised tests: The researcher will explain how to access and work through these.

Please note that these tests are only being conducted for research purposes and cannot diagnose any underlying conditions.

BrainWaveBank training: Next, you will learn how to play some games and tasks presented in the BrainWaveBank app. Then you will get familiar with and wear the headset while progressing through the app to complete a full recorded run-through. This part of the session will last around one hour and thirty minutes.

## **Independent sessions – 30 mins each (x 9)**

Following the training session, you are invited to complete five BrainWaveBank recording sessions per week over the next two weeks, at a time of your choice. The training session counts as the first. You are welcome to contact the researcher if you have questions or are unsure about any aspect of completing sessions.

## **Feedback session – 30 mins**

We will arrange another Skype appointment to ask you questions about your experience of learning to use the BrainWaveBank platform.

### BrainWaveBank Team

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**Here are a few more questions and answers to help you decide if being involved in this market research is something you might like to consider.**

**Will I be reimbursed for my time if I take part?** £80 will be given to participants as a token of thanks – this will be given regardless of whether you manage to complete all requested (9) independent sessions. To facilitate this, the company accountant will require you to provide your bank details for transfer.

**How can I be sure that my information remains confidential?** Care is taken to ensure all records identifying you are kept confidential. Only the BrainWaveBank team, named on this form, BrainWaveBank's accountant, and the courier, will have access to personally identifiable information such as names and contact details. Others, such as BrainWaveBank employees, research or business partners or contractors, may have access to non-identifiable information, such as EEG and behavioural data, for analysis purposes. Each individual's data will be assigned an anonymous ID code and will be protected by encryption during storage and transit. Your personal details will not be kept alongside any data collected via the BrainWaveBank platform. Individuals and third parties who have access to these data are aware of their responsibilities and of data protection obligations. Anonymised data may be shared with third parties both within and outside the EU, for example, for further analysis or in a presentation to a potential investor in the company. However, individually identifiable information **will not** be given to third parties or made available through presentations.

For more information on how we handle your data, please see our privacy policy, which is available at [https://www.brainwavebank.com/assets/files/BWB\\_PrivacyPolicy\\_v1.2.pdf](https://www.brainwavebank.com/assets/files/BWB_PrivacyPolicy_v1.2.pdf) alongside this document.

**If I change my mind, can I withdraw my data?** You are free to withdraw at any time, including during the enrolment session. Additionally, you have the right to request that your data be withdrawn or deleted at any time. If you request this, we will remove your data from systems where it is stored. However, we are unable to extricate your data from results once it has been analysed as part of an aggregated dataset.

**Thank you for taking the time to read through this information sheet.**

If you are satisfied with the information given and you are happy to proceed with the study, please refer to the consent form (separate form attached).

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