

## Participant Parental/Guardian Information Sheet

### **Title of the research study:**

**Can lifestyle factors shape multisensory perception?: An online study**

Thank you for considering to permit your child to participate in this research study. Before deciding if you would like them to enroll, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully and discuss it with others if you wish. If anything is unclear, please contact the researcher for clarification (Eimear McKenna: [mckennei@tcd.ie](mailto:mckennei@tcd.ie) / Fiona Newell: [fnewell@tcd.ie](mailto:fnewell@tcd.ie)).

### **Purpose of the study**

The purpose of this study is to understand if and how audiovisual integration (vision and hearing) is associated with balance and motor control across the lifespan.

### **Your child's participation**

You have been approached about this research because you have been identified as the parent/guardian of a child aged between 4 and 12 years of age. The study involves the presentation of visual stimuli and auditory stimuli, often with detail, so if your child has diagnosed sight or hearing impairments that would affect their ability to see or hear the stimuli then we do not recommend participation in this study.

The participation of your child in this project is voluntary. If you do decide to take part, after reading this information, please tick the appropriate consent box when prompted.

Even if you tick the consent box and start the task, you are free to withdraw your consent and discontinue your child's participation in this study at any stage before or during the experiment without any questions being asked by us. To discontinue the study during the task press the "Esc" key on your computer or close the browser window on your device at any time. Immediately following the task, your data will be stored as anonymous so that they cannot be linked to you or your child in any way.

### **What will happen if you consent to the study?**

For this study, you will need a quiet room and a computer or tablet with working audio output (or headphones/earphones) and access to the internet. You will receive a weblink that will take you directly to the online experiment and short questionnaire. In total the experiment should last no longer than 15 minutes, with breaks.

### **Experiment**

The experiment will involve answering some initial questions followed by an online task:

First we will ask you to provide some basic demographic details about your child: Male/Female, age, whether or not they have normal vision or wear glasses, and handedness.

Task example: your child will be asked to complete three short tasks. The first is known as the Sound Induced Flash Illusion (SIFI) and involves listening to beeps and viewing flashes on a screen and deciding how many beeps/flashes were observed. Next your child will be asked to stand on each foot for a maximum of 120 seconds, first with their eyes open, next with their eyes closed. Finally, a game will be presented that is a test of visuospatial coordination –motor skills. It will be presented as a game where the child has to click on asteroids to destroy them. We then ask questions concerning lifestyle factors can be answered by you, the parent/guardian.

You have the right to have your questions about the procedures answered (unless answering these questions would interfere with the study's outcome). If you have any questions as a result of reading this information sheet, you should ask the researcher before the consenting to partake in the study. All procedures will be explained again before commencement of each experiment.

### **Benefits of participation**

There are no known direct benefits to participating in this experiment. Instead, by participating you will be helping towards a better understanding of how our brains take in information from our senses to make meaningful interpretations of that information.

### **Risks of participation**

There are no physical or social risks involved in taking part in this study. Any risks involved in participating in this study are no greater than the risks you encounter in everyday life.

### **What will happen with your personal details?**

We do not ask you for, nor take a record of, your child's personal data. Upon completion of the task each person's data is assigned a unique ID (not your name or email) that cannot be linked to you. All the information that we collect about you during the course of the research will be kept strictly confidential and stored on our secure computers or in folders locked in secure filing cabinets located in the multisensory lab/testing suite at TCIN. Only the research team and principal investigator will have access to these data.

If you wish, you can take note of the time of finishing the task. This information can be stored privately by you so that if in the future you wish to withdraw your child etc. you can provide the information necessary to link the anonymous data to them.

During dissemination, the data presented in talks or papers will never feature information about individual participants, only anonymous ID numbers.

Note that confidentiality of collected information may only be breached if:

1. The research team has a strong belief or evidence exists that there is a serious risk of harm or danger to either the participant or another individual.

2. Disclosure is required as part of a legal process or Garda investigation. Where possible, a full explanation will be given to the participant regarding the necessary procedures and also the intended actions that may need to be taken.

**Where will the research take place?**

The study will take part online in a quiet room of your choosing.

**What if you have any concerns?**

If you have any concerns or complaints arising from this research study, please contact a member of the researcher team (contact details below).

*Study Contact Information:*

Researchers: Eimear McKenna, email: [mckennei@tcd.ie](mailto:mckennei@tcd.ie); Dr. Rebecca Hirst, email: [hirst@tcd.ie](mailto:hirst@tcd.ie)

Principal Investigator: Prof. Fiona Newell, email: [fnewell@tcd.ie](mailto:fnewell@tcd.ie) phone: +353 01 896 8418  
Trinity College Institute of Neuroscience