# **Parent/Guardian Information Sheet**

**Research Project Title**

ARED: The development of rational belief revision

**Background, aims of project**

It is commonly assumed that only humans who have reached the so-called “age of reason” (around 6 years of age) are able to reflect and understand why they believe what they believe. By contrast, younger children and animals are typically taken to be capable of unreflective thought for which they are not accountable. We are investigating whether some animals and children who have not yet learned to communicate linguistically might be able of basic forms of reflective thought which would enable them to assess their reasons for belief. Our goal is to understand the relation between the cognitive abilities of adult humans, infants, and animals. This study in particular focuses on the developmental trajectory of processing counterevidence which we assess through investigating belief revision in children of different ages and comparing their performance on the task with adults’ performance on the same task.

**Does my child have to take part?**

No. You do not have to agree for your child to take part, your child is also free to say no if they do not want to take part. If you are happy for your child to participate, you can withdraw their participation at any time without needing to explain and without penalty to you or your child by advising the researcher of this decision. If you withdraw, we will not collect any more data and any data collected up until the point of withdrawal will be destroyed. You can also withdraw your child’s data within one week of their participation. To withdraw their data, email ared@stir.ac.uk with this code \_\_\_\_\_\_\_\_ that identifies your child’s data.

**What will happen if my child takes part?**

Your child will be asked to take part in three tasks. We usually find that children enjoy taking part in tasks such as this, but if your child appears not to be enjoying the experience, or if they ask to stop, then the study will end. There is no penalty to your child for ending the study early. The testing session should take approximately one hour including breaks. **Task 1:** Using a tablet, your child will choose where to search for rewards after watching videos of people hiding them. Two people will offer good information about the location of the reward, while a third person will provide unreliable information. **Task 2:** The Test of Early Language Development 3 (TELD-3). This is a measure of your child’s understanding and production of language. Please note that we require English to be one of the languages spoken in the home. **Task 3:** Your child will watch a screen-based story in which they get a clue about where an animal is hiding, before making a choice about where to search for the animal. Sometimes the clue will be helpful and other times it will be unhelpful. Your child’s eye movements will be recorded by an eye-tracker while they watch the story. Please note that we require English to be one of the languages spoken in the home.

**Are there any potential risks in taking part?**

There are no foreseeable risks in taking part.

**Are there any benefits in taking part?**

Your child will receive a sticker or small toy for taking part. You will be offered reimbursement for travel expenses for your visit or a voucher.

**Legal basis for processing personal data**

As part of the project, we will be recording personal data relating to you and your child. This will be processed in accordance with the General Data Protection Regulation (GDPR). Under GDPR the legal basis for processing your personal data will be public interest/the official authority of the University.

**Recorded media**

We will audio record the language development task to ensure high quality data and to ensure accurate recordings of responses to the questions in the task. During task 3 your child’s eye movements and where they look will be tracked using a Tobii Spectrum eye tracker, they will also be video recorded during the task. Recordings will be used solely for the purpose of carrying out research (e.g., analysing choices and interpreting the eye tracking data). Please be aware that you may also be visible in the video. We will ask for your explicit permission to record the session. We will also ask your permission to store the video recording securely for a minimum of 10 years in line with university guidance.

**What happens to the data I provide?**

The research data collected during the testing session will be kept anonymous using a participant ID number. Only the research team will be able to connect the research data with the identifying personal information you provide. The data will only be used for research purposes. You and your child’s personal data will be kept until the end of this project (February 2025) in a secure folder on SharePoint and then will be securely destroyed. The anonymous research data will be kept indefinitely.

**Will the research be published?**

The research may be published in an academic journal and presented at conferences. Neither you nor your child will be identifiable in any publication. Publications will be promoted on the project website ([ared.stir.ac.uk](https://ared.stir.ac.uk/)).

The University of Stirling is committed to making the outputs of research publicly accessible and supports this commitment through our online open access repository STORRE. Unless funder/publisher requirements prevent us, this research will be publicly disseminated through our open access repository.

**Future uses of the data**

Due to the nature of this research, it is very likely that other researchers may find the data to be useful in answering other research questions. Therefore, anonymous research data will be made available in an open access data repository. Neither you nor your child will be identifiable from any of the data that will be shared.

**Who is organising and funding the research?**

This research is funded by a UKRI Future Leaders Fellowship awarded to Dr Giacomo Melis.

**Who has reviewed this research project?**

The ethical approaches of this project have been approved via The University of Stirling General University Ethics Panel and the Animal Welfare and Ethics Review Body.

**Your rights**

You have the right to request to see a copy of the information we hold about you and your child and to request corrections or deletions of the information that is no longer required. You have the right to withdraw from this project at any time without giving reasons and without consequences to you or your child. You also have the right to object to us processing relevant personal data, however, please note that once the data are being analysed it is not possible to remove your data from the study.

**Who do I contact if I have concerns about this study or I wish to complain?**

If you would like to discuss the research with someone, you can contact the research team via ared@stir.ac.uk. Alternatively, if you would prefer to speak to someone who is not directly involved with the project you can contact Psychology Enquiries (psych-enquiries@stir.ac.uk).

You have the right to lodge a complaint against the University regarding data protection issues with the Information Commissioner’s Office ([ico.org.uk/concerns/](https://ico.org.uk/concerns/)). The University’s Data Protection Officer is Joanna Morrow, Deputy Secretary. If you have any questions relating to data protection these can be addressed to data.protection@stir.ac.uk in the first instance.

You will be given this information sheet to keep and be asked to sign a consent form.

**Thank you for reading.**