

A Field Study of KOALA Hero --- An App Helping Parents and Children Make More Informed Choices of Mobile Apps

INFORMATION SHEET FOR PARENTS / GUARDIANS

Oxford University's Ethics Approval Reference: [R83638/RE001]

We are researchers from the Department of Computer Science at Oxford University and would like to invite you and your child to be part of a new research study. You will have the opportunity to try out our latest research prototype that can help families make a more informed choice of mobile apps for young children. Before deciding whether you want to take part, we think it is important that you understand **why** the study is being done and what it involves. After reading this information sheet, if there is anything that is not clear or you would like more information, please do not hesitate to contact the research team:

- Project investigator: Dr Jun Zhao (jun.zhao@cs.ox.ac.uk)
- Research student: Ge Wang (ge.wang@cs.ox.ac.uk)

What are we trying to find out?

Tablet computers are becoming increasingly popular among primary school-aged young children. However, parents often struggle with the choice of mobile apps used by their children or communicating with their children regarding the online privacy risks related to these technologies. To understand how to fulfil these needs is the key goal of our research.

We believe introducing good practices from a young age is critical, so that parents and children will both be better prepared when children grow older and gain more choices of their technologies and behaviours.

KOALA Hero, our Android app, is a research prototype that is designed to help parents make a choice of mobile apps together with their children, by discussing the privacy implications of these apps together. To assess the effectiveness of KOALA Hero, we would like to invite 20 families to try out our technologies in a home environment, so that we can learn whether the tool can help parents make more informed choices of apps with their child, manage stressful choice making situations, and sufficiently engaging and motivating to sustain a regular usage over a period of 3 weeks.

The finding of this trial will be critical to helping us improve our prototype and driving its next phase of public release. The study procedure and information to be collected in the study are detailed below.

More information about the project is available on our website (<https://koala.web.ox.ac.uk>) and can be obtained by contacting the research team named above.

Why have I been invited to take part?

You are invited because you have at least one child that is aged between 8 and 11 years old, who plays with

an Android tablet device for at least 2 hours per week. The device can be shared among family members, but your child should have regular access to at least 10 different mobile apps on it. You are also expected to be a family who regularly updates the apps on the tablet, installing a new app **approximately twice a week**. Overall we are inviting ~20 families to take part in our study.

Do I have to take part?

It is not compulsory to take part, and you can ask questions about the study before deciding whether or not to participate, using the contact details provided. If you agree to take part, we will then ask you to sign a consent form. You may **withdraw from the study at any time**, by 30 September 2023, without giving a reason. If, after you have taken part, you decide that you want us to remove your responses, you can contact us and ask us to delete them.

Given that the study takes over 3 weeks, we separate the study into two phases. On completion of the first half of the study, your family will receive a £10 Amazon voucher; and on completion of the full study, you will receive another £10 Amazon voucher as a thank-you token. If you request a withdraw during each of the phase, you will still receive the compensations according to the study phase you are in without receiving any penalty.

What will happen if I take part?

If you agree to take part in the study, then the following will take place:

1. **Pre-survey and study setup:** which can take place either in our research lab on Parks Road (Oxford) or via Microsoft Teams. During this process, you and your child will be invited to complete a [short survey](#), which covers topics about your family's demographics, your child's usage of the device, your approach to making choices of apps for your child, and etc. We will also set up the experimental app on your home tablet devices and go through a short session with you to learn about how to operate the software.
2. **Experiment phase:** Over the 3-week experiment period, your family is expected to use the app at your home, at least three times a week, for at least 15 minutes each time. You are welcome to use the app above and beyond the lower bound. During your use of the app with your children, you will be encouraged to use the 'think-aloud' method to talk about your interactions and any choice of decisions. This conversation will be audio recorded, which will be transmitted to the Oxford secure data server. You can choose which audio to upload and the data server will be compliant with all data privacy and security requirements of Oxford University. You will be provided with a [diary template](#) to record how long you spent on the KOALA app each, which apps you looked at, and key actions you took.
3. **Exit interview:** At the end of the field study, you and your child will be invited back to the research lab or an online session to complete a short survey and a 30-min interview about your experience of using KOALA Hero, such as what you liked and disliked about the app, what your child liked and disliked, and whether you will continue using the app after the study ended, and etc. Your experiment app and all local data will be deleted from your home device.

Part 1 and week 1 of Part 2 make up the first phase of the study, and on completion or participation of this phase, you will receive a £10 Amazon voucher. And on completion of the rest of Part 2 and Part 3, you will receive another £10 Amazon voucher as a thank-you token to your family. Withdrawal during each phase will not lead to any penalty to your compensation. Travel cost will be reimbursed up to £20 per trip.

A number of different types of data will be collected at different stages of the study, including the following:

- During the recruitment and at the beginning of the study a digital copy of the consent form will be collected.
- The pre-survey will collect some demographic information about you, such as the number of children in your household or the age range of parents/guardians. The survey will include questions like parents' approach to choosing apps for children, children's favourite apps, device usage patterns, and parents' concerns.
- The experiment stage will collect various data, including
 - App usage data: which includes key information about a user's interactions with KOALA Hero, **during the usage of the app**. Such information includes the names of the apps searched for or looked into and the amount of the time spent on KOALA Hero. **No sensitive information, such as users' location information or contact lists stored on the device will be collected.**
 - System usage data: At the time of app launching, KOALA Hero will retrieve information about the top 10 most used apps from the device system log, in order to produce an overview for the user. If the device is shared among family members, parents and children can review this list of top used apps together and select the apps that are actually used by the child, instead of by another family member.
 - Audio data: An audio recording will only take place when KOALA Hero is in use and a recording button is explicitly pressed. A recording sign will be visible on the app, to remind the participants that recording is taking place. **No recording will take place when KOALA Hero is only run in the background.** All recordings will be transferred to a secure data server run within the network of the Department of Computer Science, and will not be shared with any external organisations. If participants felt uncomfortable with any recordings, they can always send a request to the server and delete any recordings they did not want anyone to access. To give participants sufficient time to change their minds concerning the recordings submitted to the study, researchers will not access any audio recordings that are less than 2 days old.
- The exit survey will have questions like your concerns regarding the use of mobile apps, and how you make choices of mobile apps now. An audio recording of your response to the short 30-min interview will be collected, which will include questions about your experience of the app, what you and your child liked and disliked about the app, how you and your child felt about the co-learning mechanism, and whether you and your child would use such an app after the study ended.

All data collected in the study will be kept on our secure server and confidential as specified below. All audio recordings will be transcribed in order to facilitate our data analysis. You will receive a gentle reminder if we noticed that no audio recordings have been uploaded for over 4 days continuously. If we do not receive any data from you for over 1 week and we believe that there are no technical issues with the tool, then we deem your withdrawal from the study.

What are the possible disadvantages of taking part?

There are no known risks to take part in the study. We will have mechanisms in place to ensure that information collected during the study will be kept anonymous, and not be disclosed to anyone besides those named above. If any risks become known during the research, you will be informed straight away.

What are the advantages of taking part?

We hope this study will help you and your child have an opportunity to learn about some of the latest research on how to make more informed choices of mobile apps, and the value of a co-learning process. No prerequisite knowledge is required for completing the study.

Will the research be published? Could I be identified from any publications or other research outputs?

The findings from the research will/may be written up in a thesis/academic publications/conference presentation. The participants would not be identifiable from the outputs. We would like your permission to use direct quotations of your children but without identifying them in any research outputs. A copy of the thesis/ dissertation will be deposited both in print and online in the Oxford University Research Archive where it will be publicly available to facilitate its use in future research.

Data Protection

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study. The University will process your personal data for the purpose of the research outlined above. Research is a task that we perform in the public interest. Further information about your rights with respect to your personal data is available from <https://compliance.admin.ox.ac.uk/individual-rights>.

Who is conducting this research?

The research project is organised by Dr Jun Zhao of Oxford University, who is a Senior Researcher at the Department of Computer Science. The research is funded by the Oxford University COVID Rebuild Grant. The project will be carried out by Dr Zhao, together with a research student, both having received appropriate safeguarding training before participating in the study. This study has been reviewed by, and received ethics clearance through, the Research Ethics Committee at the Department of Computer Science at the University of Oxford, [Ethics approval: **R83638/RE001**].

What if there is a problem?

If you have a concern about any aspect of this study, please contact oxfordccai@cs.ox.ac.uk, and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the relevant Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible:

The Chair, Computer Science Departmental Research Ethics Committees

Email: ethics@cs.ox.ac.uk; Address: Research Services, University of Oxford, Wellington Square, Oxford OX1 2JD

Further information and details

If you are happy for your child to take part in the study, please contact oxfordccai@cs.ox.ac.uk. If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

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