

Information sheet for families

Please retain this for your records.



Your child has been invited to take part in a scientific research study carried out by Psychology researchers at the University of York. Before you provide your consent for your child to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully, and ask us if anything is not clear or if you would like more information.

What is the purpose of the study?

Vocabulary plays an important role in reading comprehension and educational success, particularly as texts become more challenging throughout the school years. In the *zzzs to AAAs* study, we hope to understand how word learning might differ for children with different levels of reading comprehension ability. Previous studies have shown that sleep is important in helping us to remember new words and link them to existing vocabulary. We aim to understand word learning differences before and after sleep, and whether this differs in children with different levels of reading comprehension ability.

Why has my child been chosen?

Throughout the last school year, your child's school has been working with us on related vocabulary projects. For the *zzzs to AAAs* study, we are using the measures we previously collected to invite a group of children with a range of reading comprehension abilities to take part. By studying these two skills together, we can better understand how word learning and comprehension abilities are related.

What does the project involve?

1. Parent/guardian consent. We first need to obtain written consent from yourself for your child to take part, using the consent form attached. If the first session is scheduled to take place at home, we can collect this from you at the start of the study. If it is scheduled to take place at school, please send the form to the school on the morning that your child will begin the study, and also email a scanned/photographed copy of your signed form to elj504@york.ac.uk. We *cannot* see your child until we have seen this form.

2. Study Part 1. The primary researcher, Emma James, is very experienced in running educational assessments and experiments with children. Depending on the timing of each session, you will have the option of Emma visiting your child at home, in school, or you visiting us at the University if you would prefer. Part 1 of the study involves three short one-to-one sessions, all scheduled to take place as early and late in the day as is convenient:

- **Learning and test** (~45 minutes). Your child will be taught 12 new words in computerised games, and their memory for these words will be tested in a number of different activities at

the end of the session. We will also play a card-matching memory game, so that we can understand differences from learning non-language information.

- **12 hour memory test** (~20 minutes). We will return approximately half a day later to carry out the memory tests for a second time.
- **24 hour memory test** (~20 minutes). We will carry out the memory tests a final time, approximately 24 hours after the learning session.

3. Sleep tracking. If your child is willing, they will be asked to wear an activity watch across the course of the week, and record their bed times in a sleep diary.

4. Study Part 2. We will repeat Part 1 of the study with a new set of 12 words, one week after Part 1. The only difference will be in the timing of the sessions: if they completed the learning session in the morning for Part 1, they will complete it in the evening for Part 2, and vice versa.

5. Study Part 3. Where possible, we will schedule a short follow-up session at school approximately one month after your child took part in the study. This will allow us test longer-term memory of the new words learned. The session will last no longer than 30 minutes, and can be scheduled at a convenient time and date.

may carry out an additional assessment of vocabulary if your child has not already completed one at school. However, this can usually fit within one of the short morning memory sessions without additional disruption.

What does the sleep tracking involve?

The activity watch is a small device worn on your child's wrist, and tracks movement across the day and night – in a similar way to a Fitbit. In combination with a sleep diary, it helps us to see how much sleep your child is getting. They can wear the watch continuously all week, or just in evenings and over the night if they would prefer.

What are the benefits in taking part in this research?

You would be helping us to gain new insights into sleep, memory and learning, and how this helps children to succeed in literacy. We can also provide you with the activity recordings, to see how much sleep your child is getting.

Your child will receive a certificate and £20 Amazon gift voucher to thank them for taking part. They will also receive a booklet to help them understand why it is important that they get enough sleep, and explaining how they have helped science by taking part in the study. The activities are designed to be fun and enjoyable, and your child is likely to learn some new words.

What are the possible disadvantages and risks of taking part?

Research at the Department of Psychology, University of York, is planned and conducted in a way that the children will be at no risk of harm. The study has been ethically approved by the University of York. Emma has an up-to-date enhanced DBS check, and is highly experienced in carrying out these activities with children.

What will happen to the data?

All the information about the children who participate in this study will be kept strictly confidential. Our procedures for handling, processing, storage, and destruction of your data are compliant with the new General Data Protection Regulation (further information about the general terms and conditions that apply with respect to the processing of personal data is provided by the Department of Psychology at <http://bit.ly/YorkPsy-GDPR>). Any information you give us and all of the measurements that we collect will be confidential, and no names will be used when the research is written up. We may make the data publicly available for purposes of open science practice, but it will not be possible to identify your child from these data files. The results from this study will be disseminated via spoken presentations at scientific conferences, and will be submitted as a paper to a peer-reviewed scientific journal.

We also collect audio recordings during the test sessions to help ensure that our scoring is accurate in tasks that require your child to produce verbal responses (e.g., naming pictures). These are also stored completely anonymously and confidentially, and will not be made available outside of the research team.

What will happen if we don't want to carry on with the study?

You and your child are free to withdraw from the study at any time and without giving an explanation. Any data gathered will remain confidential and will be stored securely.

Contact details:

For practical queries or concerns, please contact Emma James directly by email (elj504@york.ac.uk) or phone (**01904 322953**). For urgent matters relating to upcoming booked sessions, Emma can also be contacted by mobile on (**XXXXXXXXXXXX**).

Alternatively, you may contact one of the project supervisors:
Professor Gareth Gaskell
Department of Psychology, University of York, York, YO10 5DD
Phone: 01904 323187
Email: gareth.gaskell@york.ac.uk

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

Parental consent form

This form must be completed before your child takes part in any of the activities. If they begin the study at school, please email a copy to elj504@york.ac.uk, as well as sending the form with your child.



Name of participating child:

Child's school:

Please tick to confirm the following statements.

- 1. I have read and understood the information sheet. I have had the opportunity to ask questions and have had any queries answered satisfactorily.
- 2. I understand that my child's participation is voluntary and I am free to withdraw my child from the study at any time, without giving reason.
- 3. I give permission for my child to take part in this study.
- 4. I know that the information obtained will be strictly confidential and anonymised.
- 5. I agree to parts of the assessment sessions with my child being audio recorded, and understand that these recordings will be stored securely and disposed of 10 years after the project ends.
- 6. I would like to receive updates about the project, and would be happy to be contacted about future related studies by the same research group. (optional)
- 7. I would like to receive feedback on the sleep data recorded (if available)

Name of parent/guardian:

Relationship to child:

Email address:

Phone number:

Address:

Signed:..... Date:.....

Background information

Please complete as much information about your child as possible, or mark as N/A if not relevant.

Sex: male / female

Date of birth:

Please detail:

...any visual or hearing problems?

...any diagnosed language or learning disabilities?

...any additional languages spoken?

...any sleep difficulties?