

Participant information
MOVEMENT AND LEARNING



Title: *"Age-related differences in visuo-motor control and learning of functional movements – investigation of underlying mechanisms"*

We are contacting you to ask if you want your child to participate in a scientific research project that aims to investigate which mechanisms are involved in the optimization of the brain's motor control systems in connection with motor control and learning across age groups. This knowledge is important for our future opportunities to understand which processes are associated with motor control and learning from childhood to old age.

Plan for the experiment:

- The child must participate in a single trial day of approx. 1 hour and 15 minutes duration.
- During the day the child must complete movement- and computer-based tasks.
- Brain activity is measured during one of the computer-based tasks with electroencephalography (EEG).

The project emanates from Department of Nutrition, Exercise and Sports at the University of Copenhagen with the project managers, Associate Professor Jacob Wienecke and Postdoc Marta Topor. On the following pages we have described what the project is about and what it means for your child to participate. Before you and your child decide, please read the information on the following pages thoroughly to ensure that you have understood what the project is about and what it entails. Please note that participation is voluntary. Even if you have decided to participate, you and your child can withdraw from the project at any time without giving any explanation as to why you do not want to participate.

In the attached participant information, you can read more about what the experiment is about, which methods will be used and your and your child's rights if you choose to participate in the experiment.

Sincerely,

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Purpose of the experiment

The purpose of the experiment is to investigate whether you can promote academic skills through movement, as well as monitor brain activity to observe any changes. Furthermore, the trial wants to use electrophysiological techniques to document these potential changes. In this way, we can obtain important knowledge that can contribute to understanding the influence of movement on cognitive abilities.

Biological material

No biological material is taken in relation to the experiment.

Plan for the experiment

In the experiment the child must perform 2 partial tasks.

Subtask 1: In subtask 1, we examine the ability to read and the ability to move.

Subtask 2: Subtask 2 involves a movement intervention where the child is sitting still while the child's brain activity is measured by electroencephalography (EEG).

Side effects, risks, complications and disadvantages

The majority of the measurements included in the studies have all been used in the laboratory over the past 15 years. During all these years, we have not experienced any harmful effects from any of the measurement. All electrical equipment is isolated from the mains and complies with the applicable legislation within the area. All equipment is approved for medical use. The clinical person responsible for carrying out the experiments will also be informed about the progress of the experiments and can be called in case of unintended incidents. Regarding chance findings: In the (rare) cases where chance findings occur, the trial manager will contact the clinical manager who will assess the data. Subsequently, the clinical manager will hold an interview with you, who will refer you to your own doctor for a further clinical examination of your child. However, it should be mentioned that it has never been relevant in the 15 years that the techniques have been used in the laboratory. You must also be aware that your consent includes access to the disclosure and processing of necessary information about health conditions, other purely private matters and other confidential information as part of the relevant authorities' statutory control of the trial.

Electroencephalography (EEG) measurements:

EEG measuring electrodes are placed on the skin and are allergy tested. The examination is not associated with either pain or discomfort. Additional medical tape is used to secure them.

Motor movements:

The experiment contains simple motor movements that are performed while sitting. There is no possibility of falls or damage with this.

Benefit of the experiment

There is no immediate benefit from the experiment for you, but the experiment will hopefully contribute with important information about movement-enriched learning in children.

Exclusion from and suspension of trials

Unforeseen technical problems with the equipment may arise, which may mean that we have to interrupt or postpone the experiment.

Information about financial conditions

The trial is partially supported by internal research funds. The initiative for the experiment was taken by the research manager, Jacob Wienecke, and project manager, Marta Katarzyna Topor.

Access to test results

Your consent will include access to the disclosure and processing of necessary information about your child's health conditions, other purely private matters and confidential information as part of the relevant authorities' statutory control of the trial. It is expected that the project will result in approx. 1 publication in international peer-reviewed journals. Only those employees who have been directly involved in the planning, execution, analysis and compilation of the studies carried out will be co-authors on the published works. Both inconclusive, negative and positive findings will be attempted to be published. It may take several years before the publication is published.

Information about health conditions, other purely private matters and other confidential information that emerges in connection with the investigation is covered by the Act on confidentiality. All data will also be processed anonymously and in accordance with the rules from the Data Protection Authority.

Complaint

You can access documents in accordance with the rules of the Public Disclosure Act. If your child is subjected to unsatisfactory treatment, you have the opportunity to complain. If you - contrary to expectations - should need this, we will be able to help with further information and any relevant forms. In case of doubt, you can also contact the regional scientific ethics committee for the Capital Region. If you wish to apply for compensation, the application must be sent to Patient Insurance.

Appendix

Appendix 1: About the child's participation and image of the computer task and the parents' completion of the questionnaire

Appendix 2: "Subject's rights in a health science research project" is attached to this participant information.

We hope that with this information you have gained sufficient insight into what it means for your child to participate in the experiment, and that you feel equipped to make the decision about your child's possible participation. We also ask you to read the attached material in Appendix 1 and 2.

If you want to know more about the experiment, you are also very welcome to contact the project managers:

Jacob Wienecke, Associate Professor, Ph.D. cand.scient. by email: wienecke@nexs.ku.dk, phone: 35327346, or Marta Katarzyna Topor, Postdoc, cand.scient. by email: mt@nexs.ku.dk tel.: 61678974.

APPENDIX 1

RESEARCH IN MOVEMENT AND LEARNING WITH THE JUNGLE GAME

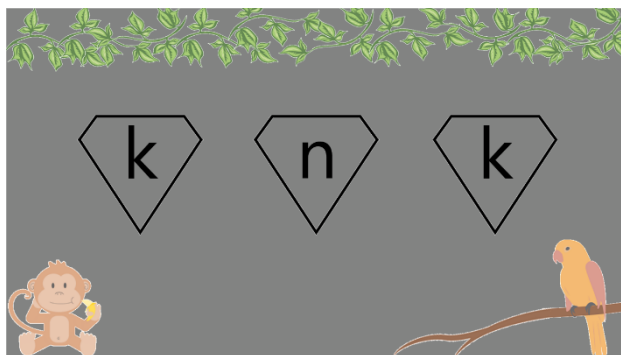
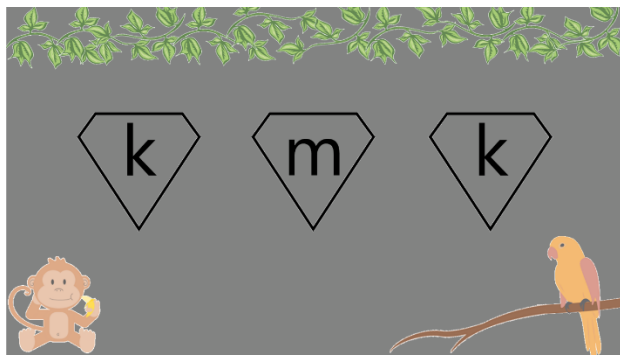


Dear parents of children in grade 0 at Skolen på Hannemanns Allé,

We are contacting you as we, in this school year, have done several projects in both 0. and 1. grade at Skolen på Hannemanns Allé with positive support from both children and parents. The overall aim with this project is to investigate the connections between movement and learning. The project takes place at the school during school hours but emanates from the Department of Nutrition, Exercise and Sports at the University of Copenhagen, with Associate Professor Jacob Wienecke and project manager Postdoc Marta Topor. Below we have described what the project is about if you want your child to participate in the project. Please note that participation is voluntary. Even if you have decided for your child to participate, you can withdraw your consent to the project at any time.

The child's participation:

The child will have to do a reading task on a computer that lasts about 5 minutes and do two movement tasks. The child will then perform a computer task (i.e., a computer game) that relates to arm and hand movements while recognizing different letters. The theme of the game will be a jungle treasure hunt where the child's task is to look for letters and make different movements (see picture).



While the child is playing the game, we will measure the brain's activity (using electrophysiological measurements, abbreviated as EEG). This is done while the child is wearing a "bathing cap" with small holes from which we can pick up signals from the brain. The measuring method and materials used are allergy tested. It is not associated with either pain or discomfort. It will take approximately 1 hour to complete all tasks.

Parents' participation:

In addition to your child's participation, we have also attached a questionnaire that one or both parents must complete. This is about your child's coordination skills and takes about 10 minutes to answer.

If you want your child to participate, you simply have to sign the consent form (both parents, if this is the case) and hand it in to the child's teacher. On the declaration of consent, one parent is asked to write a telephone number on which we will contact you, so that we can also provide verbal information about the project. IMPORTANT: Even if you give written consent, it is not valid until you have had one or more conversations about participation with us.

The questionnaire and the consent form are handed in to the teacher, and we will then contact you.

Sincerely,

Marta Topor

Postdoc, Ph.D., Cand. scient

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og

Jacob Wienecke

Lektor, Ph.D., Cand. scient

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APPENDIX 2

Subjects' rights in a health science research project

As a participant in a health science research project, you must know that:

- Your participation in the research project is completely voluntary and can only take place after you have received both written and oral information about the research project and signed consent form
- You can withdraw your consent to participate orally, in writing or by other clear indication at any time and withdraw from the research project. If you withdraw your consent this does not affect your right to current or future treatment or other rights that you may have
- You have the right to bring a family member, friend or acquaintance to the information interview
- You have the right to a reflection period before you sign the declaration of consent
- Information about your health conditions, other purely private matters and other confidential information if you, which emerges in connection with the research project, are covered by a duty of confidentiality
- Storage of information about you, including information in your blood samples and tissues, takes place in accordance with the rules in the Act on the Processing of Personal Data and the Health Act
- It is possible to obtain document inspection of trial protocols in accordance with the provisions of the Public Information Act. That means that you can get access to see all papers relating to your participation in the trial, except those parts that contain trade secrets or confidential information about others
- It is possible to complain and get compensation according to the rules in the Act on access to complaints and compensation within the healthcare system. If an injury should occur during the experiment, you can contact Patient compensation, see more at www.patienterstatningen.dk.

De Videnskabsetiske Komiteer for Region Hovedstaden (6 komiteer)

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Den Videnskabsetiske Komité for Region Sjælland

Tlf. 24 52 59 52 / 57 87 52 44

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Hjemmeside: www.regionsjaelland.dk/videnskabsetisk-komite

De Videnskabsetiske Komiteer for Region Syddanmark (2 komiteer)

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29 20 22 52 / 29 20 12 03

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