



PLAIN LANGUAGE STATEMENT AND CONSENT FORM

To: School Principal

Plain Language Statement

Date: 22/09/2017

Full Project Title: Classroom-based active breaks for typically and non-typically developing children's cognitive enhancement

Principal Researchers: Dr Lisa Barnett, Prof Jo Salmon, Prof Nicole Rinehart, Dr Tamara May, Dr Wei-Peng Teo

Student Researcher: Emiliano Mazzoli (Deakin University)

Associate Researchers: A/Prof Caterina Pesce (University of Rome 'Foro Italico', Italy), Dr Tal Dotan Ben-Soussan (Research Institute for Neuroscience Education and Didactics, Patrizio Paoletti Foundation, Italy)

Reference number: 2016-382

Invitation

We would like to invite teachers and children from your school in Grades 1 and 2 to be part of our research project. The study, funded through Deakin University and the Department of Education and Training of Victoria, is being conducted by a research team from Deakin University in cooperation with researchers from Italy. The research project consists of a pilot study that will be run during Term 4 of the school year 2017.

Aims and Background

This research project aims at assessing if cognitively stimulating classroom-based active breaks could help children to reduce sitting time, while improving cognitive performance and classroom behaviour.

Previous research has shown that reducing and breaking up sitting during class time in school benefits children's health. However, the impact of this strategy on children's focus and cognition is unclear. We wish to test in both typically developing and non-typically developing children, whether interrupting classroom seated learning with a cognitively engaging sensorimotor physical activity task produces i) favourable outcomes on children's time on task, and executive function (specifically cognitive flexibility, attention and inhibitory control) and ii) a reduction in sitting time.

What children will be asked to do?

Children will be asked to perform two daily short classroom-based active breaks (around 4 min each) for six weeks, during Term 4.

The research team will collect data on children's cognitive functioning, sitting time, behaviour during class time and enjoyment:

- a. Cognitive functioning will be measured using two computer-based tests, similar to simple video games, to measure child's cognitive functioning (i.e. executive functions). The tests take 3 and 7 minutes to complete respectively, and will be administered by using iPads.
- b. Some children's (only children providing additional consent) brain oxygenation will be measured with a non-invasive, safe and small neuroimaging tool (also adopted with neonates), worn on the forehead for a max time of 10 minutes. Children will be asked to wear this tool on the forehead while performing a cognitive test. They will wear the tool for one minute before the test starts (at rest), during the test and one minute after the test is complete. The type of cognitive test used for this assessment (i.e., Go/No-Go task) is different from those used to assess children's executive functions, because it offers a better quality measure of brain activity.
- c. Sitting time will be measured using activity monitors for two school days. This monitor is a small battery-operated device, which is worn on the thigh with the use of specifically designed elastic bands.
- d. Child's on-task behaviour will be observed for one hour in each classroom participating in the research, by a researcher that will stay quietly in the classroom and follow a systematic observation protocol.
- e. Child's enjoyment will be assessed using a survey that requires around 10 minutes to complete, asking the child to express the level agreement/disagreement (on a five-point scale) with 16 statements regarding the activity (e.g., 'I enjoy it' and 'it is not fun at all').
- f. Children's perception of physical and mental effort in performing the active break will be measured with two simple survey that takes around one minute to complete.

Most of the assessments (i.e., cognitive functioning, sitting time, on-task behaviour and brain activity) will occur at baseline and at the end of the active breaks implementation; sitting time and on-task behaviour will also be assessed during mid-Term; child's enjoyment will be measured only at the end of the activity.

What parents will be asked to do?

Parents will be asked to provide consent for their children to take part in the study and to complete a basic demographic survey on their children and themselves.

What teachers will be asked to do?

1. Consenting teachers will be asked to implement two daily short classroom-based active breaks, as they will be proposed by the research team, for 6 weeks.
2. After the implementation period, they will be asked to take part in an audio-recorded focus group, aimed at further exploring the feasibility of the proposed activity.

What resources does it involve for the school?

We ask for your approval to:

1. Communicate about the study with a nominated liaison. The liaison will be asked to distribute the parent information sheets and collect consent forms in a box for collection by Deakin staff.
2. Advertise the research project at your school through the newsletter or relevant form of parent communication.
3. We are aware that, if children are removed from class, the students must still be supervised by an adult with legal duty-of-care such as a teacher or other staff member from the school. However, all assessments should be possible in the classroom. In case different arrangements are necessary, we could assess children in a small room adjacent to the classroom with an open door (such as an equipment room). That way the teacher is still able to supervise.

Can the school, teachers or children withdraw from the study?

Participation in the studies is voluntary for schools, parents and children. The school can withdraw from the research project. Consent by parents is required for the demographic survey and a study information brochure and consent forms have been prepared for distribution to parents by schools. If children do not wish to participate they will not need to, even if their parent has consented. Likewise, teachers consent is need for taking part in the study, but their withdrawal is possible at any stage of the research project.

Will anyone else know the results?

Only the research team will have access to the resulting data. The paper forms will be stored in a locked cabinet on the Deakin Burwood campus and kept in the strictest confidence. In any publication, information will be presented in such a way that children, teachers or the school will not be identifiable.

Are there any risks for the school or children if we agree to take part in the study?

We do not see any known risks being associated with this project.

- Rather we believe that children might find active breaks and all the assessments fun.
- If a child changes their mind about participating in any aspect that is fine.
- If there are any concerns during the assessment, we will ask the child if they wish to talk to the teacher.
- All information will remain completely confidential and will be used for research purposes only. We will write up the results for research publications, but at no time children's/teachers' names or the school name be identified.
- Since the activity monitors used to measure sitting time should be worn using stickers to be applied directly on the skin, some children might experience skin irritation. If this causes too much irritation, children can stop doing this.
- The tool used for assessing brain activity is totally safe, but some children might experience discomfort wearing it or notice a light red mark on the skin soon after the assessment.

Will the study benefit this school or the children?

At the end of the study we will also provide a summary of the studies' findings to each school involved, teachers and parents. This information will be very useful in planning future research that might lead to the introduction of a new strategy, which might have the potential to improve children's health and cognitive performance.

If you approve your school's participation, please sign the attached School Consent Form and email to Dr Lisa Barnett at lisa.barnett@deakin.edu.au.

If you have any questions regarding this project, please feel free to ring Dr Lisa Barnett on 03 9244 6177 or email to lisa.barnett@deakin.edu.au, or contact Mr Emiliano Mazzoli on 03 9246 8383 ext. 95393 or email to emiliano.mazzoli@deakin.edu.au.

Kind regards,

Dr Lisa Barnett

Mr Emiliano Mazzoli

Complaints

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact: The Manager, Research Integrity, Deakin University, 221 Burwood Highway, Burwood Victoria 3125, Telephone: 9251 7129, research-ethics@deakin.edu.au Please quote project number 2016-382



PLAIN LANGUAGE STATEMENT AND CONSENT FORM

To: School Principal

Organisational Consent Form

Date: 22/09/2017

Full Project Title: Classroom-based active breaks for typically and non-typically developing children's cognitive enhancement

Reference number: 2016-382

1. I have read, and I understand the attached Plain Language Statement.
2. I give my permission for children of this school to participate in this project if they wish to according to the conditions in the Plain Language Statement.
3. I have been given a copy of Plain Language Statement and Consent Form to keep.
4. The researcher has agreed not to reveal the participants' identities and personal details or any details of the school if information about this project is published or presented in any public form.

Name of person giving consent (printed) _____

Signature _____

Date _____

Please SCAN AND email this form to:

Dr Lisa Barnett

Email: lisa.barnett@deakin.edu.au

Email: lisa.barnett@deakin.edu.au Ph: 03 92446177 FAX 03 92446261
--

CONSENT FORM

** YOUR COPY TO KEEP **



PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: **School Principal**

Organisational Consent Form

Date: 22/09/2017

Full Project Title: Classroom-based active breaks for typically and non-typically developing children's cognitive enhancement

Reference number: 2016-382

1. I have read, and I understand the attached Plain Language Statement.
2. I give my permission for children of this school to participate in this project if they wish to according to the conditions in the Plain Language Statement.
3. I have been given a copy of Plain Language Statement and Consent Form to keep.
4. The researcher has agreed not to reveal the participants' identities and personal details or any details of the school if information about this project is published or presented in any public form.

Name of person giving consent (printed) _____

Signature _____

Date _____