

Department of Psychology

University of Toronto 100 St. George Street Toronto, Ontario, Canada, M5S 3G3

Study Information Sheet & Participant Consent

We are pleased to invite you to participate in the research study investigating the development of memory and reasoning. Please read through the information below very carefully and determine whether or not you would like to participate in the study. Ensure that you are comfortable with the information provided before agreeing to participate. If you have any questions, please ask the experimenter for more information. Your participation is completely voluntary, and if you do decide to participate, you may withdraw at any time, and may decline to answer any question or participate in any parts of the procedures/tasks - all without penalty. Please note that you will be given a copy of this form for reference.

Inclusion criteria for participating includes: 18-40 years old, fluent in English, normal or corrected-tonormal vision, normal color vision, normal hearing, and no history of known neurological or psychiatric disorders.

Study Title: The behavioural development of memory and control systems

Investigator: Dr. Meg Schlichting, phone: (416) 978-7133, email: schlichting@psych.utoronto.ca

Purpose of Research: The purpose of this study is to examine the development of memory and reasoning ability through adulthood. We hope to use our research findings to inform the study of developmental psychology, human cognition, and education.

Experimental Procedures: This is an outline of what will happen during your session today.

- Participant history and screening. Before beginning the experiment, you will be asked to complete a background questionnaire that includes questions about your education, health, and demographics.
- Computer games. A series of behavioural tasks will be presented to you on your computer screen. Behavioural tasks will have you look at a series of images and make decisions about them, or try to remember them.
- Debriefing. At the end of the session, you will be fully debriefed as to the rationale and hypothesis underlying this experiment.

Time Commitment: If you choose to participate, you will be asked to complete a testing session that could last for approximately 10-60 minutes. There will be opportunities to rest during the experiment.

Compensation: You will receive either \$4-15 per hour or course credit for your participation. Some studies also include the possibility of a cash bonus of up to approximately \$5, depending on your performance. These opportunities will be clearly described in the task instructions.

Voluntariness/Early Withdrawal: This study is entirely voluntary. You are allowed to end the experimental session at any time. If you choose to withdraw, you will still receive compensation; there will be no penalty or any other undesirable consequences.

Risks and Discomforts: There are no known physical or psychological risks associated with your participation in this study.

Benefits: There are no direct benefits to participating in this research other than the opportunity to learn about the scientific method and its direct application to address research questions. Many participants perceive our tasks as fun and engaging. Furthermore, you will be making great contributions to our current understanding of memory systems across healthy development, which will ultimately help us understand how the system might malfunction in disorders as well as inform educational practice.

Results/Confidentiality: No identifying information will be stored with your experimental data. Experimental data obtained from your experimental session will be used exclusively for scientific research purposes and will be recorded and maintained in confidence and anonymity and only made available to the principal investigator (Dr. Schlichting) and trained researchers in her lab. Your participation will be completely unknown to others. You will be assigned a participant code from the online system and all data collection and analysis will be conducted with this participant code and the date/time of the session. This data is kept indefinitely in a secure location.

Importantly, the University of Toronto research ethics program may have confidential access to this data so that they can guarantee that participant protection procedures are being followed. Specifically, the research study you are participating in may be reviewed for quality assurance to make sure that the required laws and guidelines are followed. If chosen, (a) representative(s) of the Human Research Ethics Program (HREP) may access study-related data and/or consent materials as part of the review. All information accessed by the HREP will be upheld to the same level of confidentiality that has been stated by the research team.

Dissemination of Results: The results derived from this research will be published in the form of scientific journal articles and/or presented at scientific conferences. No identifiable information will be

included in these publications or presentations. Updates will be available on our lab website: (http://buddingmindslab.utoronto.ca). Following the publication of results, digital files containing your anonymized data may be made available for other researchers to analyze.

Contact Information: If you have any questions or concerns about the research, please do not hesitate to ask the experimenter or, if you wish, inquire with our lab's principal investigator directly at schlichting@psych.utoronto.ca or (416) 978-7133.

If you have any questions or concerns about your rights as a participant, you can contact the Office of Research Ethics at the University of Toronto at (416) 946-3273 or email at ethics.review@utoronto.ca.

Participant Consent:

I have read and understood the information above regarding the procedures and risks involved in this study and have received satisfactory answers to my questions related to this study.

I understand that if I have any questions or concerns resulting from my participation in this study, I may contact the laboratory members by email at buddingmindslab@gmail.com or Dr. Schlichting at schlichting@psych.utoronto.ca.

I am aware that I may withdraw from the study at any time without penalty. With full knowledge of all foregoing I agree, of my own free will, to participate in this study.

If you agree to the above statements and would like to continue with this study, please click "I agree." If you would not like to continue, please click "I disagree."