



The University of British Columbia
Faculty of Medicine
School of Audiology and Speech Sciences

LETTER OF INITIAL CONTACT

The Effects of Bilingualism on the Executive Functioning of Children with Autism Spectrum Disorder

Principal Investigator: Dr. Stefka Marinova-Todd, Ed.D., Associate Professor
School of Audiology and Speech Sciences
UBC Faculty of Medicine
(604) 822-0276
stefka@audiospeech.ubc.ca

Student Co-Investigator: Shelby Siroski, M.Sc. Candidate
School of Audiology and Speech Sciences
UBC Faculty of Medicine
(604) 928-4094
siroskis@alumni.ubc.ca

Why should you take part in this study?

You and your child are being invited to participate in this research study because your child meets the following criteria:

- Aged 6-10 years old;
- Formal diagnosis of Autism Spectrum Disorder (Autism, Asperger's, or PDD-NOS); AND
- Fits one of the following two descriptions:
 - o Is regularly exposed to two languages (English and an additional language); OR
 - o Is only exposed to one language (English only).

Why are we conducting this research?

Recent research has shown that typically developing children who are exposed to more than one language experience cognitive benefits in executive functioning. Executive functioning is the mind's "control centre", allowing you to focus on what is important in a task and ignore irrelevant information.

Interestingly, executive function, which is bolstered by bilingualism in neuro-typical children is one area where children with Autism spectrum disorder (ASD) typically have problems. Currently, there is no research investigating whether or not children with ASD who are exposed to two languages receive the same cognitive benefits as bilingual neuro-typical children. This project aims to address this gap in the research by comparing a group of monolingual children with ASD and a group of bilingual children with ASD on measures of executive functioning.

What does your participation consist of?

If you consent to participating in this study, participation in this study will involve a two-hour long testing session, typically completed in the participant's home. The co-investigator, Shelby Siroski, will administer all study tasks. Specific tasks include:

- a) A questionnaire asking about your child's ASD diagnosis, other diagnoses (if applicable), education, therapy history, and family education. *Approximately 30-40 minutes.*
- b) While you complete the questionnaire, your child will complete assessments of language understanding and non-verbal intelligence. These assessments include paper-based tasks targeting vocabulary and problem-solving. *Approximately 30-40 minutes.*
- c) While your child takes a break after the initial assessments, you will complete an interview in order to gather more specific information about your child's language exposure at home, school, and in other environments. *Approximately 10-30 minutes.*
- d) Finally, your child meeting will complete the assessments of executive functioning. These assessments include computer-based tasks such as pushing buttons in response to a presented colour or shape. *Approximately 30-40 minutes.*

What happens to the results of this study?

The results of this study will be reported in the co-investigator's graduate thesis and thesis defence presentation. The results may also be published in journal articles or presented at conferences.

Are there any risks associated with participation this study?

There are no known risks associated with this project. If your child becomes tired or loses interest during the tasks in this study, he/she will be allowed to take a break or stop the activity session. Your child will not be asked to complete the activities against his/her will.

Are there any benefits associated with participation this study?

If you consent to having your child participate in this study, you may benefit from learning about the research process (what it is like to be a study participant), and, upon completion of the study, you may find out more about the cognitive effect of bilingualism on children with ASD.

On a larger scale, this research may inform the clinical decision-making of ASD professionals when giving advice to families about home language exposure. Currently, some educational and health professionals believe that bilingualism is "too hard" and does not provide any benefits to children with ASD. This belief tends to be based on folk wisdom and not research-based evidence. This research will provide evidence to either support or contest this belief and allow these professionals to base their recommendations on research-based evidence.

Is there any reimbursement for participation in this study?

Your child will be given an educational toy or book at the end of the last session or upon discontinued participation as a token of our appreciation.

Who to contact if you have questions about this study:

If you have any questions or would like further information about this project, please feel free to contact the co-investigator and primary contact Shelby Siroski at 604-928-4094 or at siroskis@alumni.ubc.ca. You may also contact the principal investigator Dr. Stefka Marinova-Todd at 604-822-0276 or at stefka@audiospeech.ubc.ca.