

## Young Children's Speech Development

### Information and Consent Form: Speech- Language Pathologist (S-LP)

#### **What is the research about?**

Children with a speech sound disorder represent a diverse group with difficulties in speech sound production, perception and/or phonological representation. Diagnosis therefore requires access to tools that not only assess speech error patterns and phonological processes, but also speech motor control. While a number of speech assessments are available to support S-LPs in identifying error patterns and phonological processes, resources for assessing motor speech control are limited.

To address this gap, our research team is working to develop a software tool to assist S-LPs track and assess the motor-speech movements of children with a speech sound disorder. Jaw and lip movements are tracked during the production of single words and phrases, using the Motor-Speech Hierarchy (MSH) – Probe Words (PW), and compared to the motor speech movements of typically developing children.

We are seeking the participation of S-LPs, who are working with children with speech sound disorders, to test the clinical usefulness of the alpha version of the tool.

#### **Who is doing the research?**

- The research is being conducted by a team of researchers that form the SMAAT (“Speech Movement and Acoustic Tracker”) team at Curtin University.
- Linda Orton, a PhD Candidate at Curtin University, under the supervision of Dr Neville Hennessey and Dr Roslyn Ward.
- The research will be conducted in accordance with the National Statement on Ethical Conduct in Human Research (2007).
- The project is funded by Curtin University Higher Degree by Research program, supported by a scholarship funded by The PROMPT Institute, the Future Health Research and Innovation Fund scheme through the WA Near-miss Award Program and Medical Research Future Fund Chronic Neurological Conditions Grant (2016518).
- There will be no costs to you and you will not be paid for participating in this project.

#### **Why am I being asked to take part and what will I have to do?**

- We are looking for 80 Speech Language Pathologists to score the jaw and lip speech movement patterns of a total of ten children, from audio-video samples, using the Motor Speech Hierarchy-Probe Words (MSH-PW).

Our study uses a randomised cross-over study design. This means, upon informed signed consent you will be randomised to complete one scoring method – (e.g., traditional, without the use of the tool) before the other (eg., supported, with the use of the tool). You will be asked to participate in an initial training session, followed by four data collection sessions, for a total of five sessions, with two children scored per session. The training and scoring sessions will be two hours in length and delivered online.

- The traditional training session will provide background information on the Motor Speech

Hierarchy Probe Words (MSH-PW) and instruction on how to score the probe words, as outlined in the manual. You will then be provided with practice case examples. The assisted scoring condition will provide background information on the Motor Speech Hierarchy Probe Words (MSH\_PW) and how to use the tool. Following completion of the case examples in the training material, you will be provided with a code to access the online scoring form to complete the cases studies independently. You will be asked to upload the completed score form, consisting of yes-no responses, to a web-based application, operated within Curtin University.

- The training sessions and data collection sessions will only be available to you during your study participation and cannot be copied or retained.
- Data will be collected at four further time points 4 weeks apart where you will independently score two new cases under the traditional scoring method (as per MSH-PW protocol), or assisted scoring using the SMAAT app, depending on randomised group allocation.

### **Are there any risks, side-effects, discomforts or inconveniences from being in the research project?**

Apart from giving up your time, we do not expect that there will be any risks or inconveniences associated with taking part in this study.

### **What is the benefit of participating in this research project?**

The MSH-PW is new, with the validation study published in 2021. Participation in this study will provide access to professional development in the form of training in the administration of the MSH-PW. You will also be provided with information regarding the objective measurement of motor speech movement patterns, and how this information can be used to support the diagnosis of speech sound disorders.

### **Who will have access to my information?**

- The information collected in this research will be re-identifiable (coded). This means that we will collect data that can identify you but will then remove identifying information on any data and replace it with a code when we analyse the data. Only the research team has access to the code to match your name if it is necessary to do so.
- Any information we collect, will be treated as confidential and used only in this project. The following people will have access to the information we collect in this research: the research team and, in the event of an audit or investigation, staff from the Curtin University Office of Research and Development.
- Video files will be viewed and assessed through the HIPAA-compliant SMAAT system online, using Multi-Factor Authentication. The SMAAT platform will not have outbound public internet access. Access to the platform will initially be via the Curtin University workspace desktop client, with traffic traversing initially via the internet through to a secured Ronin Cloud landing area. From there, you will be directed to the Ronin Isolate Cloud-hosted SMAAT application to complete the scoring.

### **Will you tell me the results of the research?**

- The results of this research may be presented at conferences or published in professional journals.
- An information sheet will be disseminated to all participants.

### **Do I have to take part in the research project?**

No. Participation is entirely voluntary, and you are not obliged to be involved. If you choose to participate, you can withdraw at any time without giving reason. Withdrawing from the study and not participating in the study will have no consequence in any way for any current or future involvement that you might have with Curtin University.

**What happens next and who can I contact about the research?**

If you would like more information about the research, please contact Roslyn Ward via email: [r.ward@curtin.edu.au](mailto:r.ward@curtin.edu.au)

- If you decide to take part in this research, we will ask you to sign the attached Consent Form. By signing it is telling us that you understand what you have read and what has been discussed. Signing the consent indicates that you agree to be in the research project. Please take your time and ask any questions you have before you decide what to do. You will be given a copy of this information and the consent form to keep.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number 2020-327). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08) 9266 7093 or email [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au).

If you would like further information about this research, you may also contact: Dr Neville Hennessey on 9266 2553 or by email at [N.Hennessey@curtin.edu.au](mailto:N.Hennessey@curtin.edu.au); or Dr Roslyn Ward on 9266 4018 or by email at [R.Ward@curtin.edu.au](mailto:R.Ward@curtin.edu.au).

<b>HREC Project Number:</b>	2020-0327
<b>Project Title:</b>	<i>Young Children's Speech Development. Speech-Language Pathologist Consent</i>
<b>Chief Investigator:</b>	<i>Dr Neville Hennessey Senior Lecturer School of Occupational Therapy, Social Work and Speech Pathology Faculty of Health Sciences</i>
<b>Student researcher:</b>	<i>Linda Orton (PhD Candidate)</i>
<b>Version Number:</b>	3
<b>Version Date:</b>	07/02/2024

- I have read the information statement version listed above and I understand its contents.
- I believe I understand the purpose, extent and possible risks of my involvement in this project.
- I voluntarily consent to take part in this research project.
- I acknowledge the caregivers of the children in this study have provided consent for the data to be viewed in the SMAAT application only.
- I agree to accessing the video files within the SMAAT platform and will not take a copy of any of the materials.
- I have had an opportunity to ask questions and I am satisfied with the received.
- I understand that this project has been approved by Curtin University Human Research Ethics Committee and will be carried out in line with the National Statement on Ethical Conduct in Human Research (2007).
- I understand I will receive a copy of this Information Statement and Consent Form.
- I would like to receive a summary of the research after the project is complete. Tick the yes or no box:  Yes  No

Participant Name	
Participant Signature	
Date	

Declaration by researcher: I have supplied an Information Letter and Consent Form to the participant who has signed above.

Researcher Name	
Researcher Signature	
Date	

