



SYRACUSE UNIVERSITY

Department of Communication Sciences and Disorders

Protocol Title: AI-Guided Treatment for Residual Speech Sound Disorder

Principal Investigator/Key Research Personnel:

Name and Title	Role	Contact information
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Introduction:

- We are inviting you to be part of our research study. A research study is a way to learn more about different things. We estimate that approximately 8 participants will take part in this research study.

What is the purpose for the research study?

- We are interested in learning more about what it's like to have a computer control speech therapy sessions.

What are some things about the study I should know?

- If you decide you want to be part of this study, you will be asked to do some talking and listening tasks. You will name some pictures, answer some questions, repeat real and nonsense words, point to pictures, and answer some questions about your speech. You will also follow some directions to complete some mouth movements and listen for some quiet beeps or words while wearing headphones. This will take about 75 minutes of your time.
- If we think that this study is right for you, you will be asked to make recordings of you reading lists of words with “r” in them. Each recording should take 5-10 minutes and there will be between 5-10 recordings in total, spread out over many days. We will decide if you do 5, 6, 7, 8, 9, or 10 of these recordings by opening an envelope and seeing what number is inside.
- After we make all the recordings, we will ask you to do some speech lessons. Each speech lesson will take one hour of your time, twice a week for five weeks (10 hours total).
- During the first speech lesson we will teach you about what makes a good /r/ sound, and then you will practice saying the /r/ sound. In the remaining 9 sessions you will practice saying the /r/ sound over and over, with a computer reminding you about what makes a good /r/ sound and if you got it right or not.
- After the last speech lesson, we will have you make 3 more word list recordings. These will take 5-10 minutes each.
- We cannot promise that everyone who takes part in this study will benefit from the therapy. A benefit means that something good happens to you. If this study is right for you, you will get 10 speech lessons. We know that these speech lessons can make the /r/ sound more accurate for many kids, but we don’t know exactly how it will work for you.
- There are no known risks to computerized speech lessons. You might not feel comfortable if the computer is telling you that your /r/ sound isn’t correct. But you do not have to do anything you do not want to do.
- I also have to let you know if you were to tell me about anyone or anything that has hurt you or made you feel very upset, whether it’s related to this study or not, I would have to tell someone who is not in the study.

What will happen when the study is completed?

- When we are finished with the study we will write a report about what we learned about computerized speech therapy, or we might also share what we learned at special meetings, etc. The report will not include your name or that you were in the study.

Will I be photographed, audio, video, or film recorded?

- If you agree to be part of this study, we will need to audio record you talking so that other people who are part of the study can listen back to the recordings.
- We record the sound of your voice saying one word at a time (example: “ride”). Your name is not stored with the audio. These recordings are stored on a password protected

drive at Syracuse University. Only approved members of the research study will have access to the audio recordings.

- We will also need to record audio and video of the computer screen so we can re-watch the session to make sure we did everything we were supposed to do. These video recordings will not have your face in them.
- You will be able to decide what happens with the audio recordings after the study is complete. One option is to provide consent for the recordings of your voice saying one word at a time into a database to be used for future research purposes that include training future speech recognition systems. (No identifying information is included in this database other than the sound of the participant's voice). If you do not want your speech in this database then we will not share the sound of your voice outside of our lab.

Will I receive any kind of payment for participation?

- We will pay you \$5 every 15 minutes during the first visit (\$20/hour). We expect that the first session will take you 1 hour and 15 minutes, so we expect to pay you \$25.
- We will pay you \$5 per visit for each time you come to the lab for the free speech lessons. We expect to pay you \$50 for your travel to these lessons.
- If you decide to leave the study, you get to keep the money you already earned.

What else should I know before I decide to join the study?

- I have already asked your parents and they said it is okay for you to be in the study. But, you can choose if you want to be in the study or not. It's up to you to decide on your own. No one will be mad at you if you decide you do not want to be in the study.
- Once you start, if you change your mind, you can stop at any time. No one will be angry if you decide to stop. You just have to let us know.
- You can ask us questions at any time before you decide to be in the study or during the study if you decide to join.
- You can ask your parents, grandparents, teachers, etc. about being in the study.

All of my questions have been answered; I agree to participate in this research study, have audio recordings made of my speech, and have words from those recordings played to listeners without them knowing anything about me. I have received a copy of this form to keep.

Printed Name of the Participant

Date: _____

Signature of the Participant

Printed Name of the Researcher

Date: _____

Signature of the Researcher

Please answer the questions below. You can answer either yes or no to these questions and still participate in the study.

1. It is okay to store recordings of me saying words and short phrases (without my name) and share them with outside listeners as part of **a future study**.

_____ YES or _____ NO
Write your initials next to "yes" or "no".

2. It is okay to play audio recordings of me saying words and short phrases (without my name) to teach speech therapists, or students learning to be speech therapists, about what we do in our lab.

_____ YES or _____ NO
Write your initials next to "yes" or "no".

3. It is okay to add audio recordings of me saying words and short phrases (without my name) to publicly-available collections of spoken words:

_____ YES or _____ NO
Write your initials next to "yes" or "no".