

**University of California, Irvine  
Study Information Sheet**

**Linguistic Adaptation in a Multilingual Society: Perception and Production:  
Behavioral Investigations**

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**STUDY LOCATION(S): Online**

Please read the information below and ask questions about anything that you do not understand. A member from our research team will be available to answer your questions.

- You are being asked to participate in a research study. Participation in this study is voluntary. You may choose to skip a question or a study procedure. You may refuse to participate or discontinue your involvement at any time without penalty or loss of benefits. You are free to withdraw from this study at any time. **If you decide to withdraw from this study you should notify the research team immediately.**
- You are being asked to participate in a research study to improve our understanding of human communication and language acquisition. Your participation will help us to understand how adults communicate under variable conditions.
- **You are eligible to participate in this study if you are:**
  - You are between 18 and 90 years of age
  - You must be fluent, native speakers of the language being investigated (e.g., English, Mandarin, Spanish, etc.)
  - You are free of neurological disease
  - You have normal (or correctable to normal) hearing and vision

***Exclusion Requirements***

- You may be excluded from some experiment if you are not fluent native speaker of the language being investigated
- You may be excluded from some experiment if you are not monolingual native speaker of the language being investigated
- You may be excluded from some experiments if you have any neurological or psychiatric illness that interfere with your performance
- You may be excluded from some experiments if you do not have normal hearing and vision

**The research procedures involve:** You are consenting to participate in a behavioral experiment. Participation in this study is voluntary. You are free not to participate or to withdraw at any time, for whatever reason. No matter what decision you make, there will be no penalty or loss of benefit to which you are entitled. In the event that you do withdraw from this study, the information you have already provided will be kept in a confidential manner.

- You may be asked to participate in Prescreening (via email, phone, or a brief zoom meeting). This is administered during the initial recruitment and prior to participating in any actual experiments. It allows us to determine whether you meet our inclusion/exclusion criteria. This is an informal meeting. One of our lab members will describe the procedures involved in this study to you and will answer any questions you might have about the procedure.
- At the beginning of the study, you will be asked to read an information sheet and consent to participate in this study.
- During the experiment, you will be asked to read or listen to words and sentences or other speech and nonspeech stimuli, classify sequences of sounds or words, recall sentences, learn an artificial language, describe scenes presented in photos or drawings, or to rate or complete sentences. You will also be asked to make responses to written questions, photos, drawings, videos or other audio/visual stimuli. You may also be asked to repeat or read out aloud linguistic stimuli (e.g., words and sentences) presented to you. The stimuli may be presented on a computer (including mobile devices such as tablets, phones). In some experiments, you will be provided with questionnaires and surveys which will help us get a better understanding of your language and social background and experiences. In language learning experiments, you may be exposed to a small miniature language that is like real languages in many ways but is small enough to be learned during the experiment. The language will be presented in visual or video formats. At the end you will be tested to see how much of the language you have learned.
- Your response will be recorded automatically. Reaction times and electronic inputs based on mouse clicks and keyboard responses will be recorded and will be coded for analysis.
- You will be also asked to provide demographic information about yourself. This information is needed for annual reports to funding agencies, and it will be anonymous.
- Before or after some of our experiments, you may be given one or more short assessments of memory, language abilities, or a very general questionnaire about your language background. These assessments will take approximately 10-30 minutes. These tests help us analyze experimental results by establishing baseline differences between individual participants.
- Depending on the experiment, your participation could last from one minute to no more than 3 hours per session, the expected length per experiment will be indicated in the experimental instructions.
- For multi-day participation, you may spend up to no more than 3 hours per session, with a potential total of about 15 hours distributed across multiple sessions over a period of up to 12 months; the exact intervals between sessions vary depending on the specific experiment.
- We would like to have your permission to communicate with you via mobile texting. The purpose of this texting procedure is to send you alerts so that we can assess the questions under investigation in a timely and accurate manner. For instance, we may ask you via text to estimate the number of interactions with different individuals during the last hour, and to provide some context for these social interactions in order to assess your daily language use. We may engage in text messaging with you up to five times a day for a duration of seven days, which may not be consecutive.

- Some studies may involve using tablets (which we will provide) either in the lab or for you to take home if you are participating in the study from your home.
- **Possible risks/discomforts associated with the study are:** There are no known harms or discomforts associated with this study beyond those encountered in normal daily life. The possible risks and/or discomforts associated with the procedures described in this study include: possible eye strain from looking at a computer screen for several minutes at a time and/or fatigue from concentrating on the stimuli and tasks. Some participants may experience stress resulting from difficulties in performing some of the tests. Participation in this study is voluntary. There is no cost to you for participating. You may refuse to participate or discontinue your involvement at any time without penalty. You may choose to skip a question or a study procedure. We will keep all information confidential and coded and take all the precautions to keep data and identifiable information strictly confidential. However, there are always exist the potential of breach of confidentiality due to circumstances not under our control.
- **There are no direct benefits from participation in the study.** However, investigators may learn more about how language is processed in the brain and this information may be helpful to other people in the future.
- **There are no alternative procedures available.** The only alternative is not to participate in this study. If you decide to withdraw from the study or are withdrawn by the research team, you will receive compensation for the visits that you have completed.
- **Compensations:**
  - **Participants in online experiments** via Mechanical Turk, Prolific, and Finding Five will be paid according to the policy of each platform, estimated at an hourly rate of approximately \$6~\$10. Payment is prorated in half-hour increments and payment will be made for all of the time you actually participate in the study, regardless of whether you complete it or elect to withdraw prior to completion. The data you provide may be collected and used by Amazon, Prolific, or Finding Five as per its privacy agreement. This survey contains a number of checks to make sure that participants are finishing the tasks honestly and completely. As long as you read the instructions and complete the tasks, your HIT will be approved. If you fail these checks, your HIT will be rejected. This research is for residents of the United States over the age of 18; if you are not a resident of the United States and/or under the age of 18, please do not complete this survey.
  - **Participants recruited from SONA system:** You will receive extra course credit for an eligible course through the UCI Social Sciences human subjects' pool. You will receive a ½ unit of course credit for each ½ hour of participation in this study. Total amount of credit you may earn for this study is a maximum of 5 extra credit points for 5 hours of your time. The course instructor offering extra course credit for participation in research must provide alternatives to earn extra course credit. The alternative assignment must require equal or less time and effort for the amount of extra credit that can be earned through participation in research.

**Participants who are not recruited via SONA system:** You will receive \$15/hour per visit for your participation in this study, prorated in half-hour increments. For multi-day experiments, during each visit, you will be paid at a \$15 hourly rate, prorated in half-hour increments. Some studies may also provide an additional reward of \$10 to \$30 if you complete all parts of the study. Depending on the exact experiment, this bonus may be awarded directly, or probabilistically as a gift card drawn in a lottery of all participants.

- Payment is prorated in half-hour increments and payment will be made for all of the time you actually participate in the study, regardless of whether you complete it or elect to withdraw prior to completion. If you decide to withdraw from the study or are withdrawn by the research team, you will receive compensation for the visits that you have completed.
- **Cost:** There is no cost to you for participation in this study.
- All research data collected will be stored securely and confidentially. Identifiable information collected about you will be removed at the end of data collection. Research data will be stored electronically on a secure computer and a local network in an encrypted file with password protection. Deidentified data will be kept indefinitely. While the research team will make every effort to keep your personal information confidential, it is possible that an unauthorized person might see it. We cannot guarantee total privacy.
- **Future Research Use:** Researchers will use your *deidentified* information to conduct this study. Once the study is done using your *deidentified* information, we may share them with other researchers so they can use them for other studies in the future. We will not share your name or any other private identifiable information that would let the researchers know who you are. We will not ask you for additional permission to share this de-identified information.
- **Data Retention:** Deidentified data will be kept indefinitely.
- If, during the course of this study, significant new information becomes available that may relate to your willingness to continue to participate, this information will be provided to you by the research team listed at the top of the form.
- If you have any comments, concerns, or questions regarding the conduct of this research please contact the researchers listed at the top of this form.
- It is important that you promptly tell the researchers if you believe that you have been injured because of taking part in this study. You can tell the researcher in person or call him/her at the number listed at the top of this form.
- Please contact the UCI Institutional Review Board by phone, (949) 824-6662, by e-mail at [IRB@research.uci.edu](mailto:IRB@research.uci.edu) or at 160 Aldrich Hall, Irvine, CA 92697-7600 if you are unable to reach the researchers listed at the top of the form and have general questions; have concerns or complaints about the research; have questions about your rights as a research subject; or have general comments or suggestions.

**What is an IRB?** An Institutional Review Board (IRB) is a committee made up of scientists and non-scientists. The IRB's role is to protect the rights and welfare of human subjects involved in research. The IRB also assures that the research complies with applicable regulations, laws, and institutional policies.