Introduction to Online Experiments in jsPsych Workshop

Part 1: Website Basics, Intro to jsPsych, Consent Forms & Surveys

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1. Requirements for Running jsPsych Experiments

- jsPsych package
- jQuery
- Web host with PHP
- FTP Client
- Plain text/code editor

Recommendations

- **jsPsych/jQuery**: This is all included in the experiment materials, so you can use that as a starting point for any experiment
- Web host with PHP
 - For running experiments, I recommend using a paid hosting service (e.g. http://valuehost.ca/)
 - For testing, you can use a free hosting service (before you pay) (See here for recommendations: https://www.techradar.com/web-hosting/best-free-web-hosting If you need hosting for this workshop, I recommend checking out the first two Infinityfree and Byethost)
- FTP Client: Filezilla (https://filezilla-project.org/)
- Plain text/code editor
 - Mac: bbEdit (<u>https://www.barebones.com/products/bbedit/</u>), Free mode, you can download this from the App Store
 - Windows: Notepad++ (https://notepad-plus-plus.org/)

2. Resources

- jsPsych: https://www.jspsych.org/
 - o Plugin references: https://www.jspsych.org/plugins/list-of-plugins/
- **HTML**: https://www.w3schools.com/html/default.asp
- CSS: https://www.w3schools.com/css/default.asp
- **JavaScript**: https://www.w3schools.com/js/default.asp
- PHP: https://www.w3schools.com/php/default.asp

• General: The references section of w3schools site https://www.w3schools.com/

3. Consent Form Specifications

- Use an imported text file to create a consent form for your study
- Use the jspsych-instructions plugin (already imported for you)
- The consent form should be the first block that appears when you load the webpage
- jsPsych block specifications:

```
o type: instructions
o pages: the consent form formatted as outlined below
o Button text: Next
o Do NOT display the previous button
```

• Formatting for consent form text:

Research Title: ABX Task [heading 1]

Informed Consent [heading 2]

Invitation to Participate and Description of Project [heading 3]

You are invited to participate in a linguistic experiment. You are free to decline to participate if you wish. In order to decide whether or not you wish to be a part of this research study you should know enough about its general purpose, risks and benefits to make an informed judgment. This consent form gives you detailed information about the procedures of the experiment. Once you understand the procedures, you will be asked if you wish to participate. [paragraph]

Purpose of research [heading 3]

The principal researcher is Jane Doe, a graduate student in the Department of Linguistics at the University of Toronto. The general purpose of the research is to understand the relationship between individual cognition and speech perception. [paragraph]

Description of the Procedure [heading 3]

You will complete a word discrimination task in which you will hear three words and asked if the third one sounds more like the first or the second. You will also complete a background questionnaire. [paragraph]

Risks and Inconveniences [heading 3]

The procedure involves no known risk or discomfort. [paragraph]

Benefits [heading 3]

This study will provide no benefit to you but will provide us with information that may lead to the future benefit of others. [paragraph]

Compensation [heading 3]

There is no monetary compensation for this project. [paragraph]

Confidentiality [heading 3]

Your name will not be recorded and therefore will not appear in subsequent scholarly presentations or publications. Other personal information gathered in this study will not be disclosed to any persons other than the investigators and their collaborators. Furthermore, effort will be made to keep this information secure and to destroy it once the results of the study have been published. Following the standard practice in linguistics research, recorded linguistic data, however, will not be disposed (unless by specific request of the participant), as its preservation is necessary for further studies involving wider samples of speakers or for studies examining linguistic change over time. [paragraph]

Voluntary Participation [heading 3]

You are free to choose not to participate, and, if you do become a participant, you are free to withdraw from the experiment at any time during its course. Should you terminate your participation, you may do so without jeopardizing any of the following that may apply to you, namely, any opportunities to serve as a participant in future experiments or your standing as a student if you are a student. [paragraph]

Questions [heading 3]

If you have further questions about this project, please contact the principal investigator, Jane Doe (jane.doe@mail.utoronto.ca [email link]). If you have any questions about your rights as a research participant, please contact the Office of Research Ethics, 416-946-3273 or ethics.reveiew@utoronto.ca [email link]. [paragraph]

You may obtain the results of the study in the form of the final paper, upon its completion by request. [paragraph]

Authorization [heading 3]

By clicking "Next" you acknowledge that you have read this form and decided that you will participate in the experiment described above. [paragraph, strong]

• *Challenge*: Instead of using "click next to consent" see if you can figure out how to use a radio button option (e.g. https://lisasullivan.ca/sample_experiments/consent_2.html)

3. Consent Form Specifications

- Create a four part consent form using the jspsych-survey- plugins
- Import the following plugins into your document:
 - o jspsych-survey-text
 - o jspsych-survey-likert
 - o jspsych-survey-multi-choice
 - o jspsych-survey-multi-select
- These questions should load after your consent form
- jspsych-survey-text specifications
 - o type: survey-text
 - o preamble: Background Questionnaire [header 1]
 - o questions:
 - Age (3 columns, required)
 - **Gender** (15 columns, required)
 - Place of Birth (30 columns, use a placeholder to specify that this should include a City, State/Province and Country, not required)
 - Languages Spoken and Proficiency (Beginner, Intermediate, Advanced, Native) (5 rows, use a placeholder to give an example, not required)
 - o Button label should be "Next"
 - o On finish: add the data as properties, scroll to top
- jspsych-survey-likert specifications
 - o type: survey-likert
 - o preamble: Background Questionnaire [header 1] How often do you use English in the following ways? [paragraph]
 - o questions: all questions will be required and use the LUI scale (see below) as labels
 - Prompts (in order): At home, At work or school, With your friends, With your relatives
 - o Button label: Next
 - o On finish: add the data as properties, scroll to top
- jspsych-survey-multi-choice specifications
 - o type: survey-multi-choice
 - o preamble: Background Questionnaire [header 1]
 - o questions: all questions are not required, are not horizontal and will use scales as options (see below)
 - Prompts (in order): Would you describe where you live as urban or rural?, How would you describe your socioeconomic status?, What is the highest level of education you have completed?
 - o Button label: Next
 - o On finish: add the data as properties, scroll to top

• jspsych-survey-multi-select specifications

• In order to use options and labels, you will need to **specify some scales**. You can do this inside the jsPsych block, but I find it easier and cleaner to create separate variables for these then use the variable name in the jsPsych block. Put these scales in the Global Variables section

```
o Scale format: var scalename = ["Level 1", "Level 2", ...];
o LUI Scale: Always, Sometimes, Seldom, Never
o Socioeconomic Status Scale: Working Class, Lower Middle Class, Upper Middle Class, Upper Class, Prefer Not to Say
o Education Scale: Less than High School, High School Diploma, College Certificate/Diploma, Bachelor's Degree, Master's Degree, PhD
o Rurality Scale: Rural, Urban, Unsure, Prefer Not to Say
o Continent Scale: Africa, Antarctica, Asia, Australia & Oceania, Europe, North America, South America
```

Recommendations

- o Give each question a name, this will make it easier to add them as properties
- o Add and test your blocks one at a time. This will make sure you have each block right before you move on to the next one
- The **on finish** part of each block should look something like this:

• Your pages should look something like this:

Background Questionnaire

Age					
Gender					
Male, Female, Other					
Place of Birth					
City, State/Province, Country					
Languages Spoken and Profic	iency (Beginner, Intermediate, Advanced, Native)				
e.g. English, Native					
			li.		
	Continue				
	Background Qu	iestionnaire			
How often do you use English	in the following ways?				
	At home	a			
Always	Sometimes	Seldom	Never		
Always	Sometines	Seldoni	INEVEL		
At work or school					
	\bigcirc		\bigcirc		
Always	Sometimes	Seldom	Never		
	With your fri	ends			
	\circ	0	\circ		
Always	Sometimes	Seldom	Never		
With your relatives					
	· Muryour rei	<u> </u>			
	0	Calda	News		
Always	Sometimes	Seldom	Never		
	Next				

Background Questionnaire

Wo	uld you describe where you live as urban or rural?		
0	Rural		
0	Urban		
0	Unsure		
0	Prefer Not to Say		
Ho	w would you describe your socioeconomic status?		
0	Working Class		
0	Lower Middle Class		
0	Upper Middle Class		
0	Upper Class		
0	Prefer Not to Say		
Wh	at is the highest level of education you have completed	1?	
0	< High School		
0	High School Diploma		
0	College Certificate/Diploma		
0	Bachelor's Degree		
0	Master's Degree		
0	PhD		
0	Prefer Not to Say		
		Nex	t
		Background (Questionnaire
Wh	nich continents have you visited? (Select all that apply)		
	Africa		
	Antarctica		
	Asia		
	Australia		
	Europe		
	North America		
	South America		
		N	Next

• Challenge: Try to use jspsych-survey-html-form to recreate some of all of the survey

Note: I've added some CSS to make everything look better. To see what it looks like without the CSS, comment out the link to style.css in the head