Getting started on coding ES

10 April 2020

Modern Research Methods

Literature Search (Assignment 7)

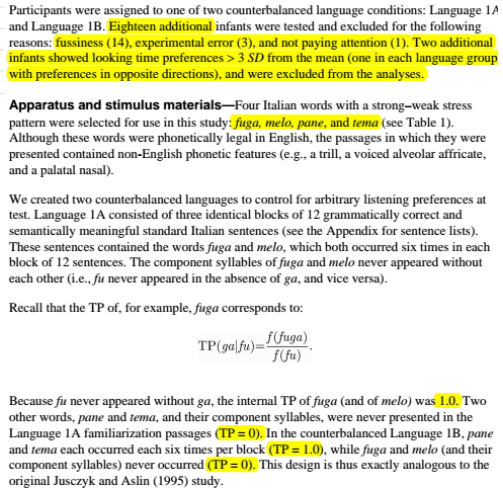
Literature Search for the Linda Problem

File Edit View Insert Format Data Tools Add-ons Help Last edit was made yesterday at 2:00 PM by Funglun Chan

4/1/2020

	protocol_id	coder_name	date_added	google_scholar_page	unique_id	paper_citation_apa	link	screening_decision
2	1	zoe	4/1/2020	1	morier1984	Morier, D. M., & Borgida,	https://journals.sac	exclude
3	1	zoe	4/1/2020	1	charness2009	Morier, Dean M., and Eu	https://www.scienc	include
4	1	zoe	4/1/2020	1	sides2002	Sides, A., Osherson, D.,	https://link.springer	include
5	1	zoe	4/1/2020	1	hertwig1999	Hertwig, R. and Gigeren	https://onlinelibrary	include
6	1	zoe	4/1/2020	1	fiedler1988	Fiedler, K. The depender	https://link.springer	include
7	1	zoe	4/1/2020	1	bonini2004	Bonini, N., Tentori, K. an	https://onlinelibrary	include
8	1	zoe	4/1/2020	1	wolford1990	Wolford, G., Taylor, H.A.	https://link.springer	include
9	1	zoe	4/1/2020	1	agnoli1989	Agnoli, Franca, and Davi	https://www.scienc	include
10	1	zoe	4/1/2020	1	moro2008	Moro, R. On the nature c	https://link.springer	exclude
11	1	zoe	4/1/2020	2	dulany1991	Don E. Dulany and Denis	https://guilfordjourr	include
12	1	zoe	4/1/2020	2	hillel1991	Bar-Hillel, M. Commenta	https://link.springer	exclude
13	1	zoe	4/1/2020	2	fisk2016	Pohl, R. F. (Ed.). (2017).	https://www.taylorfr	exclude
14	1	zoe	4/3/2020	2	reyna1991	Reyna, Valerie F. "Class	https://www.scienc	exclude
15	1	zoe	4/6/2020	2	nilson2008	Nilsson, H. (2008), Exp	https://onlinelibrary	include

Get papers (Assignment 8)



Participants were assigned to one of two counterbalanced language conditions: Language 1A and Language 1B. Eighteen additional infants were tested and excluded for the following reasons: fussiness (14), experimental error (3), and not paying attention (1). Two additional infants showed looking time preferences > 3 *SD* from the mean (one in each language group with preferences in opposite directions), and were excluded from the analyses.

Apparatus and stimulus materials—Four Italian words with a strong–weak stress pattern were selected for use in this study: *fuga, melo, pane*, and *tema* (see Table 1). Although these words were phonetically legal in English, the passages in which they were presented contained non-English phonetic features (e.g., a trill, a voiced alveolar affricate, and a palatal nasal).

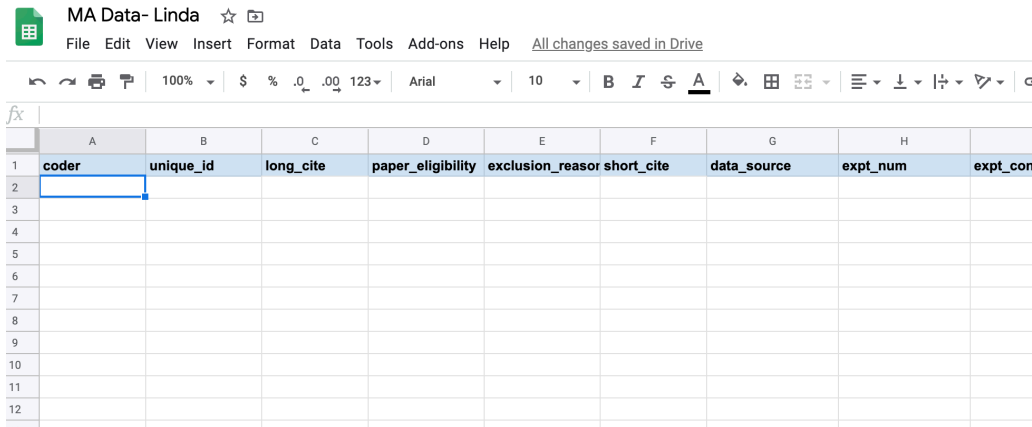
We created two counterbalanced languages to control for arbitrary listening preferences at test. Language 1A consisted of three identical blocks of 12 grammatically correct and semantically meaningful standard Italian sentences (see the Appendix for sentence lists). These sentences contained the words *fuga* and *melo*, which both occurred six times in each block of 12 sentences. The component syllables of *fuga* and *melo* never appeared without each other (i.e., *fu* never appeared in the absence of *ga*, and vice versa).

Recall that the TP of, for example, *fuga* corresponds to:

$$\mathrm{TP}(ga|fu) = \frac{f(fuga)}{f(fu)}.$$

Because *fu* never appeared without *ga*, the internal TP of *fuga* (and of *melo*) was 1.0. Two other words, *pane* and *tema*, and their component syllables, were never presented in the Language 1A familiarization passages (TP = 0). In the counterbalanced Language 1B, *pane* and *tema* each occurred each six times per block (TP = 1.0), while *fuga* and *melo* (and their component syllables) never occurred (TP = 0). This design is thus exactly analogous to the original Jusczyk and Aslin (1995) study.

Enter data to calculate effect size (Assignment 8)

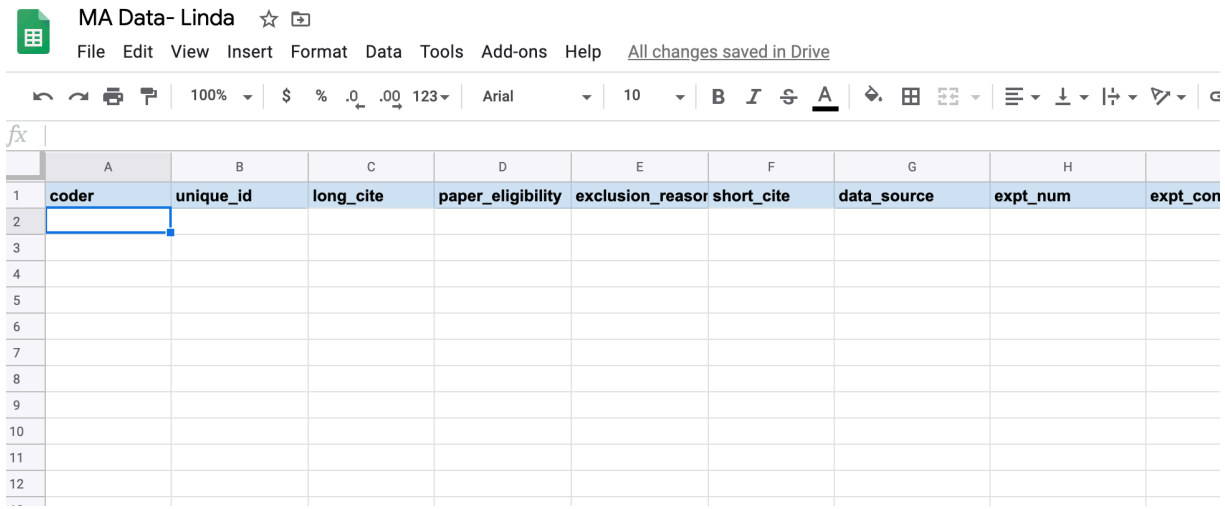


MA Data- Linda

File Edit View Insert Format Data Tools Add-ons Help All changes saved in Drive

	coder	unique_id	long_cite	paper_eligibility	exclusion_reasor	short_cite	data_source	expt_num	expt_con
2									

Coding studies for effect sizes



Meta-info about paper

Stats for calculating effect size

moderators

studies

	A	B
1	study_ID	long_cite
2	SaffranAslinNewport1996	Saffran, J. R., Aslin, R. N., & Nev
3	SaffranAslinNewport1996	Saffran, J. R., Aslin, R. N., & Nev
4	PelucchiHaySaffran2009a	Pelucchi, B., Hay, J. F., & Saffrar
5	PelucchiHaySaffran2009a	Pelucchi, B., Hay, J. F., & Saffrar
6	PelucchiHaySaffran2009a	Pelucchi, B., Hay, J. F., & Saffrar
7	PellucchiHaySaffran2009b	Pelucchi, B., Hay, J. F., & Saffrar

...

AP	AQ
x_1	SD_1
7.97	2.008581589
6.77	2.155550974
8.21	2.593838854
9.08	2.95160973
8.75	2.03646753
10.06	NA

...

AJ	AK
method	exposure_phase
HPP	familiarization
HPP	familiarization
HPP	familiarization
HPP	familiarization
HPP	familiarization
HPP	familiarization

⋮

Goals for today:

1. Take the list of “include” papers from your “relevant_studies” spreadsheet and put it in your “MA_data” spreadsheet. (Jaeah)

2. Understand the MA_data spreadsheet, and how to start coding papers. (Molly)

Steps for creating spreadsheet to code papers

1. Sort the "relevant_studies" sheet by **unique_id**. Are there any duplicates?
   - For the duplicate unique_ids, look at the paper_citation_apa column. If the duplicates are actually duplicate papers, delete one of the entries.
   - If the duplicated unique_ids identify different papers, change one of the unique ids.
2. Sort your "relevant_studies" by **screening_decision.**
3. Go to the "relevant_studies" spreadsheet, and copy the **unique_id** and **paper_citation_apa** columns <u>for only the rows where exclusion decision is "include"</u>
4. Paste the copied rows into the "MA data Template" spreadsheet.

Minimal Group Paradigm

- ingroup liking/allocation vs. outgroup liking/allocation
- Remember dependent measure has to be either liking or allocation
- Convert months to age (1 month = 30.44 days)
- To calculate effect size, we need one of the follow:
  - $M_{ingroup}$, $M_{outgroup}$, $SD_{ingroup}$, $SD_{outgroup}$
  - *t*-score comparing in group vs. outgroup
  - Cohen's *d*
- If there's a plot the the means and standard deviation on them (error bars) we can measure the plot – let me know if you encounter one of these.
- Moderators to code

Linda Problem

- Linda problem: Mean number of conjunctive errors AND number of participants that made at least one error
- To calculate effect size, we need one of the follow:
  - Prop. with at least one error
  - M_{errors}, $SD_{errrors}$
  - *t*-score comparing in N errors to chance (I bet you won't see this)
  - Cohen's *d* (I bet you won't see this)
- If there's a plot the the means and standard deviation on them (error bars) we can measure the plot – let me know if you encounter one of these.
- Moderators to code

Syntactic Bootstrapping

- Convert months to age (1 month = 30.44 days)
- Moderators
- Just verbs
- Include screenshot of video stimuli

Things to remember

- Each row is 1 effect size. Some papers may have many effect sizes; some may have only 1.
- If you decide to exclude a paper after looking at the full text, you only need to complete the first 5 columns in the MA_data spreadsheet.

- Coding effect sizes takes time (this why I'm only asking you to do 5!)
- You will likely need help with some of your papers
- So, I **strongly** encourage you to get started early and come to Jaeah and my office hours next week.