Project working title: PSY2002 Lab 3

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#### A. Hypotheses

### **Description of essential elements**

- 1. Describe the (numbered) hypotheses in terms of directional relationships between your (manipulated or measured) variables.
  - a. The number of hours per week that a person spends on the Internet ("WWWHR") will be predicted by their vocabulary ("WORDSUM"), age ("AGE"), sex ("SEX"), religiosity ("RELITEN"), political orientation ("POLVIEWS"), and how often they work from home ("WRKHOME").
  - b. GSS asks each respondent whether they think that a university professor should be fired if it is discovered that he/she believes in communism ("COLCOM"). The likelihood that a respondent will think the communist teacher should be fired will be predicted by the respondent's age ("AGE"), sex ("SEX"), number of children ("CHILDS"), marital status ("MARITAL"), religiosity ("RELITEN"), and political orientation ("POLVIEWS").
  - c. The number of sexual partners that a person has had in the previous 5 years ("PARTNRS5") will be predicted by their age ("AGE"), sex ("SEX"), sexual orientation ("SEXORNT"), marital status ("MARITAL"), religiosity ("RELITEN"), and political orientation ("POLVIEWS").
- 2. For interaction effects, describe the expected shape of the interactions.
  - a. N/A
- 3. If you are manipulating a variable, make predictions for successful check variables or explain why no manipulation check is included.
  - a. N/A

### **Recommended elements**

- 1. A figure or table may be helpful to describe complex interactions; this facilitates correct specification of the ordering of all group means.
  - a. N/A
- 2. For original research, add rationales or theoretical frameworks for why a certain hypothesis is tested.
  - a. N/A
- 3. If multiple predictions can be made for the same IV-DV combination, describe what outcome would be predicted by which theory.
  - a. N/A

#### **B.** Methods

### **Description of essential elements**

Design

List, based on your hypotheses from section A:

- 1. Independent variables with all their levels
  - a. Age ("AGE")
  - b. Sex ("SEX")
  - c. Sexual orientation ("SEXORNT")
  - d. Marital status ("MARITAL")
  - e. Religiosity ("RELITEN")

- f. Political orientation ("POLVIEWS").
- g. Vocabulary ("WORDSUM")
- h. How often they work from home ("WRKHOME")
- i. Number of children ("CHILDS")
- 2. Dependent variables, or variables in a correlational design
  - a. Number of hours per week that a person spends on the Internet ("WWWHR")
  - b. Whether a university professor should be fired if it is discovered that he/she believes in communism ("COLCOM")
  - c. The number of sexual partners that a person has had in the previous 5 years ("PARTNRS5")

Third variables acting as covariates or moderators.

d. N/A

### Planned sample

- 3. If applicable, describe pre-selection rules.
  - a. N/A Secondary data analysis of public data.
- 4. Indicate where, from whom and how the data will be collected.
  - a. This dataset contains responses from a nationally representative sample of adults in the United States to the "General Social Survey" or "GSS" by the National Opinion Research Center (University of Chicago). The GSS seeks to measure social attitudes, religion, education, policy attitudes, and other aspects of social life. The GSS has been collected annually or biannually since the 1970s. This particular dataset only contains data collected in 2010 through inperson interviews. Each interview took approximately 1 to 1.5 hours.
- 5. Justify planned sample size (if applicable, you can upload a file related to your power analysis here (e.g., a protocol of power analyses from G\*Power, a script, a screenshot, etc.).
  - a. N/A Secondary data analysis of public data.
- 6. Describe data collection termination rule.
  - a. N/A Secondary data analysis of public data.

#### Exclusion criteria

- 7. Describe anticipated specific data exclusion criteria. For example:
  - a. missing, erroneous, or overly consistent responses;
    - a. See Section C.7 for missing data handling
  - b. failing check-tests or suspicion probes;
    - a. N/A
  - c. demographic exclusions;
    - a. N/A
  - d. data-based outlier criteria;
    - a. N/A
  - e. method-based outlier criteria (e.g. too short or long response times).
    - a. N/A

#### Procedure

- 1. (Recommended element, in the online form see next page) Set fail-safe levels of exclusion at which the whole study needs to be stopped, altered, and restarted. If applicable, you can upload any files related to your methods and procedure here (e.g., a paper describing a scale you are using, experimenter instructions, etc.).
  - a. N/A

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- 2. Describe all manipulations, measures, materials and procedures including the order of presentation and the method of randomization and blinding (e.g., single or double blind), as in a published Methods section.
  - a. All data were collected by the National Opinion Research Center.

## C. Analysis plan

### **Confirmatory analyses**

Describe the analyses that will test each main prediction from the hypotheses section. For *each one*, include:

- 1. the relevant variables and how they are calculated;
  - o All variables are raw, single-item measures
- 2. the statistical technique;
  - o a) Poisson regression
    - Partial effect sizes calculated as Cohen's d (Coxe, 2018)
  - o b) Logistic regression
    - Partial effect sizes calculated as Odds Ratios (logistic regression)
  - o c) Negative Binomial regression
    - Partial effect sizes calculated as Cohen's d (Coxe, 2018)
- 3. each variable's role in the technique (e.g., IV, DV, moderator, mediator, covariate);
  - o N/A
- 4. rationale for each covariate used, if any;
  - o N/A
- 5. if using techniques other than null hypothesis testing (for example, Bayesian statistics), describe your criteria and inputs toward making an evidential conclusion, including prior values or distributions.

### **Recommended elements**

Specify contingencies and assumptions, such as:

- 6. Method of correction for multiple tests.
  - $\circ$  N/A
- 7. The method of missing data handling (e.g., pairwise or listwise deletion, imputation, interpolation).
  - o Pairwise deletion will be used for analysis variables. Only observations with complete data for across all variable in analyses will be in the thesis.
- 8. Reliability criteria for item inclusion in scale.
  - $\circ$  N/A
- 9. Anticipated data transformations.
  - N/A
- 10. Assumptions of analyses, and plans for alternative/corrected analyses if each assumption is violated.
  - o N/A

Optionally, upload any files here that are related to your analyses (e.g., syntaxes, scripts, etc.).

### Answer the following final questions:

Has data collection begun for this project?

- o No, data collection has not begun
- ✓ Yes, data collection is underway or complete

If data collection has begun, have you looked at the data?

o ✓ Yes

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# o No

The (estimated) start and end dates for this project are (optional):
Any additional comments before I pre-register this project (optional):
This preregistration is an assignment for a graduate course at the University of Toronto, PSY2002.