

Lab 1 Exercise: Summated Rating Model & Reliability

In addition to further familiarizing participants with the summated rating model and the execution of a reliability analysis, the goal of this lab is give participants exposure to data “pre-processing” and management in R (i.e., removing extraneous information, dealing with missing data), as well as some practice at using the output of a scaling methodology in a subsequent statistical analysis.

The central question at hand is whether the first four survey items listed below (items a–d) can be scaled via the summated rating model into a unidimensional and statistically reliable measure of something we might call “political suspicion.” Furthermore, we might want to test whether the resultant political suspicion scale (assuming we can create one) is predictive of other things, such as specific conspiracy beliefs. The second bullet point below, for instance, describes a question about beliefs in the link between childhood vaccinations for viral diseases such as measles, mumps, and rubella (MMR) and autism.

The data, contained in the file “Suspicion, 2014 CCES.dta,” come from a group module of the 2014 Cooperative Congressional Election Study, a nationally-representative stratified sample survey fielded online by Yougov/Polimetrix. The data were collected during the pre-election wave of the survey in October 2014. In addition to the four suspicion items listed in Table 1, the file includes information about respondents’ partisan and ideological predispositions, trust in government, educational attainment, religiosity, age, gender, and racial and ethnic background. Information about all of these variables appear below.

Variable coding/wording for CCES variables

- Do you agree or disagree with the following statements? 0-3, where 0 – Strongly agree, 3 – Strongly disagree
 - (a.) Government institutions are controlled largely by elite outside interests. (`outsideint`)
 - (b.) In national politics, nothing happens by accident. (`noaccidents`)
 - (c.) Politicians often lie, deflect blame and find other ways to look innocent. (`lies`)
 - (d.) In national politics, you can see patterns, designs and secret activities everywhere once you know where to look. (`secrets`)
- There is a link between childhood vaccinations and autism. (`antivaxx`)
 - 0. Disagree

1. Agree

- Distrust of government (**trust**)
Scale of several questions about trust across institutions, 0–16 (low trust)
- 7-point party identification (**pid**)
-3-3, where -3 strong Democrat, 3 strong Republican
- 7-point ideological self-identification (**ideo**)
-3-3, where -3 – extremely liberal, 3 – extremely conservative
- Importance of religion (**religimp**)
0-3, where 0 – not at all important, 3 – very important
- Education (**educ**)
0-5, where 0 – no high school, 5 – postgrad
- Race: Black (**black**)
 - 0. Non-black/African American
 - 1. Black/African American
- Race: Hispanic (**hispanic**)
 - 0. Non-Hispanic
 - 1. Hispanic
- Age (**age**)
Age in years
- Female (**female**)
 - 0. Male
 - 1. Female