#Data analysis

\*\*RStudio Package.\*\* I used `r cite\_r("r-references.bib")` for all the analyses.

\*\*Dataset.\*\* I conducted the analysis using the data set Study1\_ready\_short.

\*\*Data cleansing.\*\* I cleaned the data by removing the rows with missing values (NAs).

\*\*Subdatasets.\*\* Before executing main analysis in R, I created sub-datasets for each dependent variables (truth, acceptability, familiarity, stereotypicality, and positivity), for each experiments (experiment 1a and 1b).

Before testing the predictions for judgments of truth, I first extracted and stacked the columns ('ID', 'gender', 'Consistency', 'Format', 'TruthMenPos', 'TruthWomenPos', 'TruthMenNeg', 'TruthWomenNeg') to create the data set my\_data\_gender\_T. Then, I created the data set my\_data\_age\_T, which includes the columns named: 'ID', 'gender', 'Consistency', 'Format', 'TruthOldPos', 'TruthYoungPos', 'TruthOldNeg', 'TruthYoungNeg'.

In the same way, I created the following subdatasets: my\_data\_gender\_A (acceptability), my\_data\_age\_A, my\_data\_gender\_F (familiarity), my\_data\_age\_F, my\_data\_gender\_S (stereotypicality), my\_data\_age\_S, my\_data\_gender\_P (positivity), and my\_data\_age\_P.

\*\*Age groups.\*\* Our subjects comprised of 61 younger people, 78 middle-aged people and 44 older people. Among them, 2 younger subjects and 15 older subjects identified themselves as middle-aged. None of the subjects identified with the 'wrong' age group (younger participants identifying with older people, or older participants identifying with younger people). Such that I used their 'subjective' age group in the analyses (young: 59, middle-aged: 95, old: 29). Moreover, I distinguish them between 3 rather than 2 age groups: younger, middle-aged, older (middle-aged = 51.91% > 25%).

##\*\*Analysis plan.\*\*

\*\*Main effect and interaction effect on the judgement of truth.\*\*

According to the pre-analysis plan that we registered, the analyses on data sets my\_data\_gender\_T and my\_data\_age\_T involve testing the main effect of valence on the judgments of truth, testing the interaction effect between group membership and valence and testing 2 planned contrasts of the interaction.

\*\*Main effect and interaction effect on the judgement of social acceptability.\*\*

Accordingly, the analyses on data sets my\_data\_gender\_A and my\_data\_age\_A involve testing the main effect of valence on the judgments of acceptability, and testing the interaction effect between group membership and valence (1 planned contrast).

\*\*Exploratory analysis.\*\*

In the exploratory analysis, first, a two way ANOVA will be performed on related subdatasets. The ANOVA involves testing the main effect of group membership and the interaction effect between group membership and valence on the perceived familiarity, stereotypicality and positivity.

Further, if the consistency and format of the claims affect how group membership and valence affect the various dependent variables. Then, a linear regression will be carried out to test if consistency and format of the claims affect how group membership and valence affect the various dependent variables.