

Disgust Scale Analysis

Your Name Here

3 May 2020

Due by 23:59, Sunday, 3 May 2020

Load the clean data

The disgust questionnaire is described in the papers by Webb, Geen and Brasher (2000), Berger and Anaki (2014, 2015) and the short summary document. The pdf files of these articles are in the Disgust Documentation folder.

The original questions were supposed to be rated on a 0-4 scale. But the data set contained some numbers that are larger than 4. I assume that these were recording errors. These rows have been removed. Three of the original data, Q1, Q6 and Q10, had reversed scales according to the scoring instructions. In this data set, those questions have had their scores reversed. The subjects who failed the catch questions have been removed and as have the catch questions themselves (Q12-Catch and Q16-Catch). We end up with 1444 out of 1598 subjects. There are six columns giving subject ID number, age, gender, education, religion and political orientation. The remaining 25 columns are the response each subject gave to each of the 25 questions using a 0-4 Likert scale (assumed to be ordinal, not metric).

```
# read in the clean data  
df <- read.csv("Disgust Data.csv")
```

Task

Use an appropriate subset of the techniques presented by Patrick Mair in Chapters 2, 3, 4 and 8 (perhaps 0 to find structure and latent variables in the data set. Are the latent variables similar to those described in the journal articles? Can you find any relationship of the demographic variables (e.g, age, gender, etc.) to the latent variables you have discovered.

There is no single approach that is correct. The tools for dealing with these data are scattered throughout the above-cited chapters:

- Optimal Scaling
- Tetrachoric and polychoric correlations
- Exploratory Factor Analysis
- Confirmatory Factor Analysis
- Item Response Theory (IRT) Analysis

Follow some examples in the book and adapt them to this particular set of data. Above all ask questions and seek my advice and help.

References

Webb, D. J., Green, C. L., & Brashear, T. G. (2000). Development and Validation of Scales to Measure Attitudes Influencing Monetary Donations to Charitable Organizations. *Journal of the Academy of Marketing Science*, 28(2), 299-309. doi:10.1177/0092070300282010

Berger, U., & Anaki, D. (2014). Demographic influences on disgust: Evidence from a heterogeneous sample. *Personality and Individual Differences*, 64, 67-71. doi:https://doi.org/10.1016/j.paid.2014.02.016

Berger, U., & Anaki, D. (2015). Data from “Demographic Influences on Disgust: Evidence from a heterogeneous sample.”. *Journal of Open Psychology Data*, 3(e1), 1-3. doi:http://doi.org/10.5334/jopd.ag