README

Replication Data For: Linking Knowledge with Action when Engagement is Out of Reach

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Suggested citation for study design and original data collection:

Emmelhainz, R., A. Zarychta, T. Grillos, and K. Andersson. 2021. "Linking Knowledge with Action when Engagement is Out of Reach: Three Contextual Features of Effective Public Health Communication." *Journal of Health Policy and Planning* (Forthcoming). [DOI TBD.]

Computing Environment:

Operating Systems: Windows 10 64-bit

R version 4.0.2 (2020-06-22), Platform x86_64-w64-mingw32/x64 (64-bit)

Estimated run time for all analyses: <10 minutes.

R Packages required:

```
library(Hmisc)
library(interplot)
library(ggplot2)
library(gridExtra)
library(mediation)
library(htmlTable)
library(htmltools)
library(texreg)
```

List of Files:

Data:

- honduras.txt: The cleaned and anonymized original survey data is available in the file. This dataset contains all data necessary to generate the tables and figures presented in the main text of the article. It is formatted as a tab-delimited file with headers, and should be compatible with any statistical analysis software.

Code:

- KTAForRep.R: Use with dataset honduras.txt to reproduce all tables and figures from the main text of the article (Table 1, Figure 1, Table 2, and Figure 2). Before running this R script, you will need to set a working directory path and install the required packages listed above. The code will automatically export the tables and figures as new files in your working directory.

Documentation:

- README_Aug2021.pdf: This file, which lists all files and computer environment dependencies necessary to verify the results from this manuscript.

- Codebook_Aug2021.pdf: Codebook defining all variables included in the honduras.txt dataset.

Tables and Figures Reproduced:

Table 1: Regression Models Showing Experimental Treatment Effects (Unstandardized Coefficients) on Salience (S), Credibility (C), Legitimacy (L), and Intention to Act (A). *(Code reproduces as file "kta_table1.html".)*

Figure 1: Mutual Interaction Effects of Salience, Credibility, and Legitimacy on Intention to Act. *(Code reproduces each of the three sections as separate files: "kta_fig1_top.pdf", "kta_fig1_mid.pdf", and "kta_fig1_end.pdf".)*

Table 2: Mediation Analysis Showing Treatment Effects on Intention to Act through a Combined SCL Pathway. *(Code reproduces as file "kta_table2.html".)*

Figure 2: Interaction Effect between Gender and Legitimacy on Intention to Act. *(Code reproduces as file "kta_fig2.pdf".)*

Additional Notes:

1) The provided files will replicate all tables and figures contained in the main text of the associated article. Replication code for the tables in the Supplementary Information appendix is available from the researchers upon request (contact Alan Zarychta or Roger Emmelhainz).

2) Note that the random bootstrapping involved in some of the code means that exact estimates are not reproducible without specifying a random seed (which would defeat the purpose of replication testing). In particular, you should expect the estimates contained in Table 2 to vary slightly each time the code is run.