Coodbook

2024-08-21

```
# Packages
library(tidyverse)
library(codebook)
library(osfr)
library(papaja)
library(kableExtra)
```

This page contains the **codebook** (i.e., description of each variable) of the data set used in the manuscript *#Knowledge: Improving food-related knowledge via seeding implemented as a social media intervention*. The data file (named `data_insta_seeding.csv`) can be downloaded from the OSF or with the command `osfr::osf_download(osf_retrieve_file('gva9p'))`.

```
# The make_df_readme function generates a summary of a given data frame in R, creating a desc

make_df_readme <- function(df, desc, add_examples = TRUE, digits = 2, n_examples = 4) {

  # Input validation
  if (!is.data.frame(df)) stop("The input 'df' must be a data frame.")
  if (!is.character(desc) || length(desc) != ncol(df))
    stop("The 'desc' argument must be a character vector with the same length as the number o
  if (!is.numeric(digits) || digits < 0) stop("The 'digits' argument must be a non-negative i
  if (!is.numeric(n_examples) || n_examples <= 0) stop("The 'n_examples' argument must be a p

  # Create the initial summary dataframe
  temp0 <- data.frame(
    "Variable"       = names(df),
    "Type"           = sapply(df, function(x) class(x)[1]), # Ensure it handles multiple clas
    "Description"    = desc,
    stringsAsFactors = FALSE
  )
```

```
  row.names(temp0) <- NULL

  # Optionally add examples
  if (add_examples) {
    sampled_rows   <- df[sample(1:nrow(df), n_examples), ]
    example_values <- apply(sampled_rows, 2, function(col) {
      if (is.numeric(col)) {
        col <- printnum(col, digits=digits)
      }
      paste(col, collapse = ", ")
    })

    temp0$Example <- example_values
  }

  return(temp0)
}
```

```
# download data
# osf_download(osf_retrieve_file("gva9p"),path = "Data")

# read in data
df <- read_csv2("../Data/data_insta_seeding.csv") %>%
        mutate(input_times = as.numeric(input_times))
```

The data file `data_insta_seeding.csv` contains 44 variables and 10506 rows.

```
desc <- c("Unique person identifier",
          "Criterion shown during 15 day training/seeding phase",
          "Estimated criterion in the final questionnaire",
          "Phase of the experiment [2AFC, estimation]",
          "Number of trial in the corresponding phase",
          "In which position was the old item shown during thte 2AFC test",
          "File name of the old item",
          "File name of the new item",
          "Image selected as old by the participant",
          "Unique item identifier [1-60]",
          "Name of the item",
          "Category of the item",
          "Was this item a seeding item in the CO2 account? [1 = yes, 0 = no]",
          "Was this item a seeding item in the Kcal account? [1 = yes, 0 = no]",
```

```
          "Actual CO2 criterion value of the item",
          "Actual kcal criterion value of the item",
          "Estimate/judgment of the participant",
          "Individual keys pressed by the participants to type in their judgment",
          "Overall reaction time for each judgment (from stimulus shown until confirmed butto
          "Internal experimental clock time when the stimulus was shown",
          "Internal experimental clock time when the first input was made",
          "Internal experimental clock time for all inputs",
          "Day when the item was posted on the corresponding account (only applicable if it w
          "Total time (in min) taken by the participant for all trials in the corresponding p
          "Age of the participant",
          "Gender of the participant [female, male, non_binary]",
          "Educational level of participants",
          "Self-reported knowledge of CO2 footprint of food items [1-7]",
          "Self-reported knowledge of calorie content of food items [1-7]",
          "Item 1 of the Short Subjective Numeracy Scale",
          "Item 2 of the Short Subjective Numeracy Scale",
          "Item 3 of the Short Subjective Numeracy Scale",
          "Controle question: ~ Should your date be used for analyis? [yes, no]",
          "Controle question: ~ Did you use any form of aid? [yes, no]",
          "Controle question: ~ Where there any technical problems [yes, no]",
          "Controle question: ~ Describe the problem",
          "Controle question: ~ Where there any problems on instagram? [yes, no]",
          "Controle question: ~ Describe the problem",
          "Controle question: ~ How many posts of the 30 possible posts did you see on instag
          "Controle question: ~ How did you make your estimates ? Did you use a specific stra
          "Controle question: ~ Do you have any ohter comments?",
          "On which day after the first invitation to the final questionnaire did the partici
          "Number of posts liked of the participant [0-30]",
          "Number of unique days on which the participant liked the posts [0-15]")


make_df_readme(df,desc) %>%
  kable(format     = "html",
        table.attr = 'class="table table-striped table-hover"',
        escape     = FALSE)
```

Variable	Type	Description
ID	character	Unique person identifier
trained_criterion	character	Criterion shown during 15 day training/seeding phase
est_criterion	character	Estimated criterion in the final questionnaire

Variable	Type	Description
phase	character	Phase of the experiment [2AFC, estimation]
trial	numeric	Number of trial in the corresponding phase
position_old	character	In which position was the old item shown during thte 2AFC t
old	character	File name of the old item
new	character	File name of the new item
img_clicked	character	Image selected as old by the participant
ID_item	numeric	Unique item identifier [1-60]
item	character	Name of the item
category	character	Category of the item
seeding_CO2	numeric	Was this item a seeding item in the CO2 account? [1 = yes, 0
seeding_Kcal	numeric	Was this item a seeding item in the Kcal account? [1 = yes, 0
crit_CO2	numeric	Actual CO2 criterion value of the item
crit_kcal	numeric	Actual kcal criterion value of the item
judgment	numeric	Estimate/judgment of the participant
input_values	character	Individual keys pressed by the participants to type in their ju
rt_ms	numeric	Overall reaction time for each judgment (from stimulus shown
time_stim_shown	numeric	Internal experimental clock time when the stimulus was show
first_input_time	logical	Internal experimental clock time when the first input was ma
input_times	numeric	Internal experimental clock time for all inputs
day_posted	numeric	Day when the item was posted on the corresponding account
est_phase_time_min	numeric	Total time (in min) taken by the participant for all trials in t
age	numeric	Age of the participant
gender	character	Gender of the participant [female, male, non_binary]
education_level	character	Educational level of participants
CO2_knowledge	numeric	Self-reported knowledge of CO2 footprint of food items [1-7]
Kcal_knowledge	numeric	Self-reported knowledge of calorie content of food items [1-7]
SNS_1	numeric	Item 1 of the Short Subjective Numeracy Scale
SNS_2	numeric	Item 2 of the Short Subjective Numeracy Scale
SNS_3	numeric	Item 3 of the Short Subjective Numeracy Scale
quality	character	Controle question: ~ Should your date be used for analyis? [y
cheated	character	Controle question: ~ Did you use any form of aid? [yes, no]
technical_problems	character	Controle question: ~ Where there any technical problems [yes
technical_problems_specific	character	Controle question: ~ Describe the problem
technical_problems_insta	character	Controle question: ~ Where there any problems on instagram
technical_problems_insta_specific	character	Controle question: ~ Describe the problem
est_number_insta_posts	numeric	Controle question: ~ How many posts of the 30 possible posts
strategy	character	Controle question: ~ How did you make your estimates ? Did
other_comments	character	Controle question: ~ Do you have any ohter comments?
participated_day	numeric	On which day after the first invitation to the final questionna
n_posts_liked	numeric	Number of posts liked of the participant [0-30]

n_dates_liked	numeric	Number of unique days on which the participant liked the po