

Participant Characteristics

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Contents

Introduction	1
Setup	1
Data file	1
Overview of participant characteristics	1
References	4

Introduction

This file is meant to reproduce the participant characteristics reported in the supplemental information of the paper (Table S6)

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Setup

First, we load the packages we need.

```
library(formatR)  # For formatting
library(pander)   # For pander tables
```

Data file

We load the data that we need.

```
df = read.csv(file = "Data/all_coded_data.csv")

# Only need single row per person
df = df[df$response_type == 'activity_experience1',]
```

Overview of participant characteristics

Now we print an overview of the participant characteristics in a table. We consider the age, gender, highest completed education level, existence of a previous quit attempt of at least 24 hours, smoking frequency, TTM-stage for becoming physically active based on adapting to physical activity the question by (Norman et al. (1998)), TTM-stage for quitting smoking (DiClemente et al. (1991)), and the weekly exercise amount.

```

# Let's first look at the distribution of
# people across the age bins
age_bins = c(-1, 2, 4, 6, 8, 11)
age_bins_names = c("18 - 30", "31 - 40", "41 - 50",
  "51 - 60", "61 - 74")

tab = rbind(c("AGE", ""))
for (b in 2:length(age_bins)) {
  num_people_age_bin = length(which(df$age_bin <=
    age_bins[b] & df$age_bin > age_bins[b - 1]))
  perc_people_age_bin = round(num_people_age_bin/nrow(df) *
    100, 2)
  tab = rbind(tab, c(paste(age_bins_names[b - 1],
    ", n (%)"), paste(num_people_age_bin, "(",
    perc_people_age_bin, "%)")))
}

resp_types = c("Gender.identity", "Highest.education.level.completed",
  "Quit.Before.24h", "Smoking.frequency", "TTM_PA",
  "TTM_Smoking", "Weekly.Exercise")
titles = c("GENDER", "HIGHEST COMPLETED EDUCATION LEVEL",
  "PREVIOUS QUIT ATTEMPT OF AT LEAST 24 HOURS",
  "SMOKING FREQUENCY", "TTM-STAGE FOR BECOMING PHYSICALLY ACTIVE",
  "TTM-STAGE FOR QUITTING SMOKING", "WEEKLY EXERCISE AMOUNT")
answer_names = c(c("Male", "Female", "Other"), c("No formal qualifications",
  "Secondary education (e.g. GED/GCSE)", "High school diploma/A-levels",
  "Technical/community college", "Undergraduate degree (BA/BSc/other)",
  "Graduate degree (MA/MSc/MPhil/other)", "Doctorate degree (PhD/other)",
  c("Yes", "No"), c("Once a day", "2 - 5 times a day",
    "6 - 10 times a day", "11 - 19 times a day",
    "More than 20 times a day"), c("Maintenance",
    "Action", "Preparation", "Contemplation",
    "Precontemplation"), c("Preparation", "Contemplation"),
  c("Never (0 - 60 minutes per week)", "Sometimes (60 - 150 minutes per week)",
    "Often (more than 150 minutes per week)"))
answer_names_nums = c(3, 7, 2, 5, 5, 2, 3)

j = 1

for (r in resp_types) {
  title = titles[j]
  tab = rbind(tab, c(title, ""))
  freq = setNames(as.data.frame(table(df[, r])),
    c("value", "n"))
  perc = round(100 * (freq$n/nrow(df)), 2)

  for (v in 1:length(freq$n)) {
    tab = rbind(tab, c(paste(answer_names[sum(answer_names_nums[1:j -
      1]) + v], ", n (%)"), paste(freq$n[v],
      "(", perc[v], "%)")))
  }

  num_na = sum(is.na(df[, r]))

```

```

num_na_perc = round(100 * (num_na/nrow(df)),
2)
tab = rbind(tab, c("No data", paste(num_na, "(",
num_na_perc, "%)")))

j = j + 1
}

colnames(tab) = c("Characteristic", "Value")
pander(tab, caption = paste("Participant characteristics.",
" Characteristics of the 671 participants with at least one valid free-text response.",
" Abbreviations:", " GED, General educational development; GCSE,",
" General certificate of secondary education; BA, Bachelor of Arts; BSc,",
" Bachelor of Science; MA, Master of Arts; MSc, Master of Science; MPhil,",
" Master of Philosophy; PhD, Doctor of Philosophy; TTM, Transtheoretical model."))

```

Table 1: Participant characteristics. Characteristics of the 671 participants with at least one valid free-text response. Abbreviations: GED, General educational development; GCSE, General certificate of secondary education; BA, Bachelor of Arts; BSc, Bachelor of Science; MA, Master of Arts; MSc, Master of Science; MPhil, Master of Philosophy; PhD, Doctor of Philosophy; TTM, Transtheoretical model.

Characteristic	Value
AGE	
18 - 30 , n (%)	315 (46.94 %)
31 - 40 , n (%)	168 (25.04 %)
41 - 50 , n (%)	100 (14.9 %)
51 - 60 , n (%)	70 (10.43 %)
61 - 74 , n (%)	18 (2.68 %)
GENDER	
Male , n (%)	310 (46.2 %)
Female , n (%)	349 (52.01 %)
Other , n (%)	11 (1.64 %)
No data	1 (0.15 %)
HIGHEST COMPLETED EDUCATION LEVEL	
No formal qualifications , n (%)	5 (0.75 %)
Secondary education (e.g. GED/GCSE) , n (%)	76 (11.33 %)
High school diploma/A-levels , n (%)	170 (25.34 %)
Technical/community college , n (%)	103 (15.35 %)
Undergraduate degree (BA/BSc/other) , n (%)	211 (31.45 %)
Graduate degree (MA/MSc/MPhil/other) , n (%)	95 (14.16 %)
Doctorate degree (PhD/other) , n (%)	7 (1.04 %)
No data	4 (0.6 %)
PREVIOUS QUIT ATTEMPT OF AT LEAST 24 HOURS	
Yes , n (%)	528 (78.69 %)
No , n (%)	143 (21.31 %)
No data	0 (0 %)
SMOKING FREQUENCY	

Characteristic	Value
Once a day , n (%)	36 (5.37 %)
2 - 5 times a day , n (%)	165 (24.59 %)
6 - 10 times a day , n (%)	213 (31.74 %)
11 - 19 times a day , n (%)	190 (28.32 %)
More than 20 times a day , n (%)	64 (9.54 %)
No data	3 (0.45 %)
TTM-STAGE FOR BECOMING PHYSICALLY ACTIVE	
Maintenance , n (%)	44 (6.56 %)
Action , n (%)	188 (28.02 %)
Preparation , n (%)	159 (23.7 %)
Contemplation , n (%)	83 (12.37 %)
Precontemplation , n (%)	197 (29.36 %)
No data	0 (0 %)
TTM-STAGE FOR QUITTING SMOKING	
Preparation , n (%)	94 (14.01 %)
Contemplation , n (%)	577 (85.99 %)
No data	0 (0 %)
WEEKLY EXERCISE AMOUNT	
Never (0 - 60 minutes per week) , n (%)	174 (25.93 %)
Sometimes (60 - 150 minutes per week) , n (%)	322 (47.99 %)
Often (more than 150 minutes per week) , n (%)	170 (25.34 %)
No data	5 (0.75 %)

References

- DiClemente, Carlo C, James O Prochaska, Scott K Fairhurst, Wayne F Velicer, Mary M Velasquez, and Joseph S Rossi. 1991. "The Process of Smoking Cessation: An Analysis of Precontemplation, Contemplation, and Preparation Stages of Change." *Journal of Consulting and Clinical Psychology* 59 (2): 295.
- Norman, GJ, SV Benisovich, CR Nigg, and JS Rossi. 1998. "Examining Three Exercise Staging Algorithms in Two Samples." In *19th Annual Meeting of the Society of Behavioral Medicine*.