

German and Dutch Translations of the Artificial-Social-Agent Questionnaire Instrument for Evaluating Human-Agent Interactions

Participant Characteristics

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Introduction

This document is meant to describe the participant characteristics from Table A1 in the Appendix. This includes the age, gender, and highest completed education level. Moreover, for the participants of the German summative assessment, we mention how many of them had German as their first language.

Required files: Data/prolific_export_final_eval_dutch_first_half_final_2023_12_15_anonym.csv,
Data/prolific_export_final_eval_dutch_second_half_final_2023_12_15_anonym.csv, Data/prolific_export_final_eval_g
Data/prolific_export_final_eval_german_second_half_2023_07_15_anonym.csv

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Load packages

Let's load the packages that we need.

```
library(dplyr)
library(formatR) # For formatting
library(gtsummary) # For the participant characteristics overview
library(pander) # For pandering tables
panderOptions("table.alignment.default", "left")
```

Load data

Here we load the four data files with data from people's Prolific profiles.

```
data_dutch_h1 <- read.csv("Data/prolific_export_final_eval_dutch_first_half_final_2023_12_15_anonym.csv")
data_dutch_h2 <- read.csv("Data/prolific_export_final_eval_dutch_second_half_final_2023_12_15_anonym.csv")
data_dutch <- rbind(data_dutch_h1, data_dutch_h2)
data_german_h1 <- read.csv("Data/prolific_export_final_eval_german_first_half_final_2023_07_15_anonym.csv")
data_german_h2 <- read.csv("Data/prolific_export_final_eval_german_second_half_final_2023_07_15_anonym.csv")
data_german <- rbind(data_german_h1, data_german_h2)
```

And to report the highest completed education level, we also need the data from the questionnaire. While we did also extract the highest completed education level from people's Prolific profiles, that data might be outdated. We asked the exact same question in the questionnaire.

```
data_dutch_q_h1 <- read.csv("Data/Final_ASA_Dutch_Summative_First_Half_final_2023_12_15_anonym.csv")["education_level"]
data_dutch_q_h2 <- read.csv("Data/Final_ASA_Dutch_Summative_Second_Half_final_2023_12_15_anonym.csv")["education_level"]
data_dutch_q <- rbind(data_dutch_q_h1, data_dutch_q_h2)
data_german_q_h1 <- read.csv("Data/Final_ASA_German_Summative_First_Half_final_2023_07_15_anonym.csv")["education_level"]
data_german_q_h2 <- read.csv("Data/Final_ASA_German_Summative_Second_Half_final_2023_07_15_anonym.csv")["education_level"]
data_german_q <- rbind(data_german_q_h1, data_german_q_h2)
```

Right now, the education level is represented as numbers. Let's replace them with more meaningful strings.

```
data_dutch_q[data_dutch_q == 1] <- "No formal qualifications"
data_dutch_q[data_dutch_q == 2] <- "Secondary education (e.g. GED/GCSE)"
data_dutch_q[data_dutch_q == 3] <- "High school diploma/A-levels"
data_dutch_q[data_dutch_q == 4] <- "Technical/community college"
data_dutch_q[data_dutch_q == 5] <- "Undergraduate degree (BA/BSc/other)"
data_dutch_q[data_dutch_q == 6] <- "Graduate degree (MA/MSc/MPhil/other)"
data_dutch_q[data_dutch_q == 7] <- "Doctorate degree (PhD/other)"
data_dutch_q[data_dutch_q == 8] <- "Don't know/not applicable"

data_german_q[data_german_q == 1] <- "No formal qualifications"
data_german_q[data_german_q == 2] <- "Secondary education (e.g. GED/GCSE)"
data_german_q[data_german_q == 3] <- "High school diploma/A-levels"
data_german_q[data_german_q == 4] <- "Technical/community college"
data_german_q[data_german_q == 5] <- "Undergraduate degree (BA/BSc/other)"
data_german_q[data_german_q == 6] <- "Graduate degree (MA/MSc/MPhil/other)"
data_german_q[data_german_q == 7] <- "Doctorate degree (PhD/other)"
data_german_q[data_german_q == 8] <- "Don't know/not applicable"
```

Age, gender, and German as first language

Dutch study

Let's first print the age and gender overview of the participants of the Dutch summative analysis study.

```
demographics_summary <- data_dutch %>% select(
  Gender,
  Age)
```

```
tbl_summary(demographics_summary,
  label = list(Gender ~ 'Gender',
    Age ~ 'Age'),
  statistic = list(Age ~ "{mean} ({sd}), Range: {min}-{max}") %>%
  modify_header(label = "**Variable**") %>% # update the column header
  bold_labels())
```

Variable	N = 240
Gender	
Man (including Trans Male/Trans Man)	109 (45%)
Non-binary (would like to give more detail)	11 (4.6%)
Woman (including Trans Female/Trans Woman)	120 (50%)
Age	29 (8), Range: 18-64

German study

And now we show the age and gender of the participants of the German summative analysis study. We also show how many of the participants had German as their first language. All participants had German as their primary language.

```
demographics_summary <- data_german %>% select(
  Gender,
  Age,
  First_Language_German)

tbl_summary(demographics_summary,
  label = list(Gender ~ 'Gender',
    Age ~ 'Age',
    First_Language_German ~ 'First language German'),
  statistic = list(Age ~ "{mean} ({sd}), Range: {min}-{max}") %>%
  modify_header(label = "**Variable**") %>% # update the column header
  bold_labels())
```

Variable	N = 240
Gender	
Man (including Trans Male/Trans Man)	120 (50%)
Non-binary (would like to give more detail)	7 (2.9%)
Woman (including Trans Female/Trans Woman)	113 (47%)
Age	31 (10), Range: 19-69
First language German	147 (61%)

Highest completed education level

Dutch study

Let's first print the highest completed education level of participants of the Dutch summative analysis study.

```
demographics_summary <- data_dutch_q %>% select(
  education_level)

tbl_summary(demographics_summary,
  label = list(education_level ~ 'Highest completed education level')) %>%
```

```
modify_header(label = "**Variable**") %>% # update the column header
bold_labels()
```

Variable	N = 240
Highest completed education level	
Doctorate degree (PhD/other)	7 (2.9%)
Don't know/not applicable	1 (0.4%)
Graduate degree (MA/MSc/MPhil/other)	64 (27%)
High school diploma/A-levels	44 (18%)
Secondary education (e.g. GED/GCSE)	4 (1.7%)
Technical/community college	11 (4.6%)
Undergraduate degree (BA/BSc/other)	109 (45%)

German study

And now we show the highest completed education level of the participants of the German summative analysis study.

```
demographics_summary <- data_german_q %>% select(
  education_level)

tbl_summary(demographics_summary,
  label = list(education_level ~ 'Highest completed education level'))%>%
  modify_header(label = "**Variable**") %>% # update the column header
  bold_labels()
```

Variable	N = 240
Highest completed education level	
Doctorate degree (PhD/other)	5 (2.1%)
Don't know/not applicable	1 (0.4%)
Graduate degree (MA/MSc/MPhil/other)	63 (26%)
High school diploma/A-levels	74 (31%)
No formal qualifications	1 (0.4%)
Secondary education (e.g. GED/GCSE)	5 (2.1%)
Technical/community college	17 (7.1%)
Undergraduate degree (BA/BSc/other)	74 (31%)