

# EJPA New Data

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Updating EJPA data revisions with new Montclair data - collection to be closed 12/13/19 (we already have 300 self-respondents, just waiting on twice-removed stragglers - reminders were sent 12/5/19)

→ There were 303 self raters, 148 once-removed raters, and 40 “twice-removed” raters. After data cleaning (ensuring that the target of the rating was indeed the researcher-intended *first* person), we conservatively retained 27 fully matched individuals (across all three rating sources).

Total number of missing responses for the newly gathered data were 17 for selves, 26 for once-removed raters, and 44 for twice-removed raters.

| Self   | Missing Values | Once   | Missing Values | Twice   | Missing Values |
|--------|----------------|--------|----------------|---------|----------------|
| Self 1 | 3              | Once 1 | 3              | Twice 1 | 12             |
| Self 2 | 4              | Once 2 | 4              | Twice 2 | 3              |
| Self 3 | 1              | Once 3 | 5              | Twice 3 | 8              |
| Self 4 | 5              | Once 4 | 4              | Twice 4 | 8              |
| Self 5 | 2              | Once 5 | 7              | Twice 5 | 6              |
| Self 6 | 1              | Once 6 | 0              | Twice 6 | 4              |
| Self 7 | 0              | Once 7 | 1              | Twice 7 | 3              |
| Self 8 | 1              | Once 8 | 2              | Twice 8 | 0              |

Looking at all 102 combined raters:

| Self   | Missing Values | Once   | Missing Values | Twice   | Missing Values |
|--------|----------------|--------|----------------|---------|----------------|
| Self 1 | 18             | Once 1 | 12             | Twice 1 | 39             |
| Self 2 | 15             | Once 2 | 10             | Twice 2 | 29             |
| Self 3 | 8              | Once 3 | 17             | Twice 3 | 28             |
| Self 4 | 10             | Once 4 | 12             | Twice 4 | 31             |
| Self 5 | 9              | Once 5 | 19             | Twice 5 | 23             |
| Self 6 | 3              | Once 6 | 10             | Twice 6 | 27             |
| Self 7 | 3              | Once 7 | 3              | Twice 7 | 18             |
| Self 8 | 3              | Once 8 | 6              | Twice 8 | 13             |

SDs look different across groups - might be interesting to look at but running out of time - 12/30/19

Possibly easier to visualize? (same as Figure 3):

Paper analyses below:

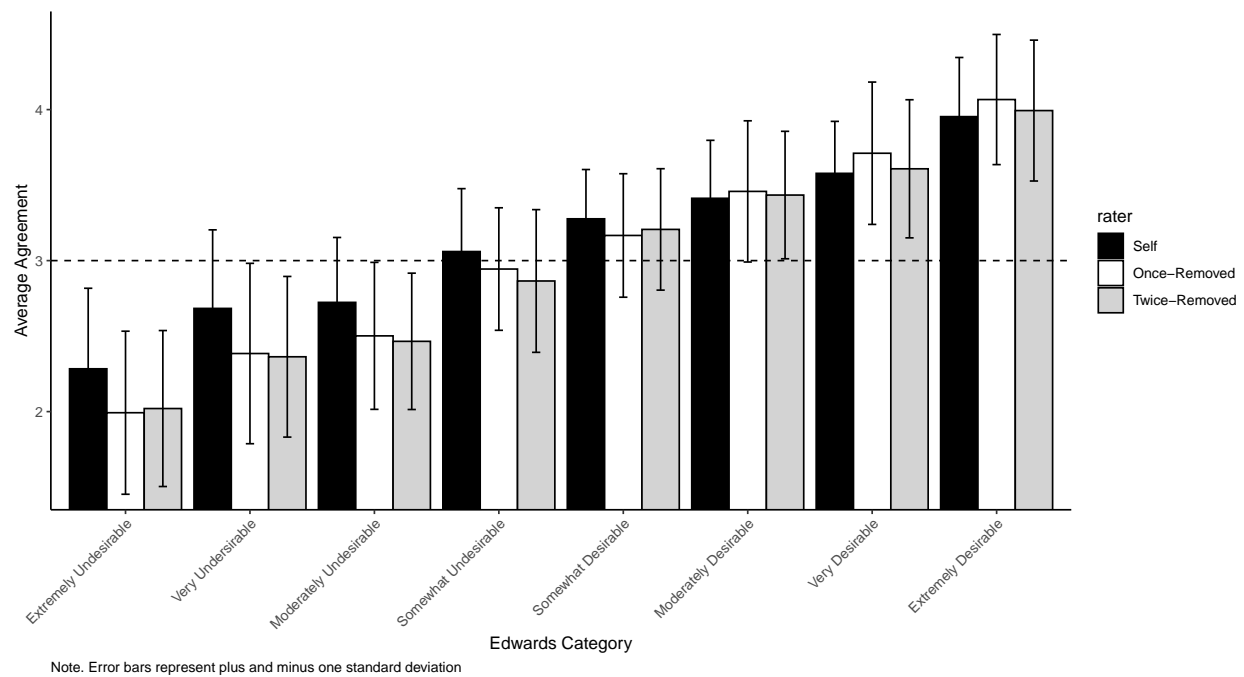


Figure 1: *Figure 1.* Average response (1=Strongly Disagree; 5=Strongly Agree) by item desirability and rater type ( $n = 306$  [102 each rater group]).

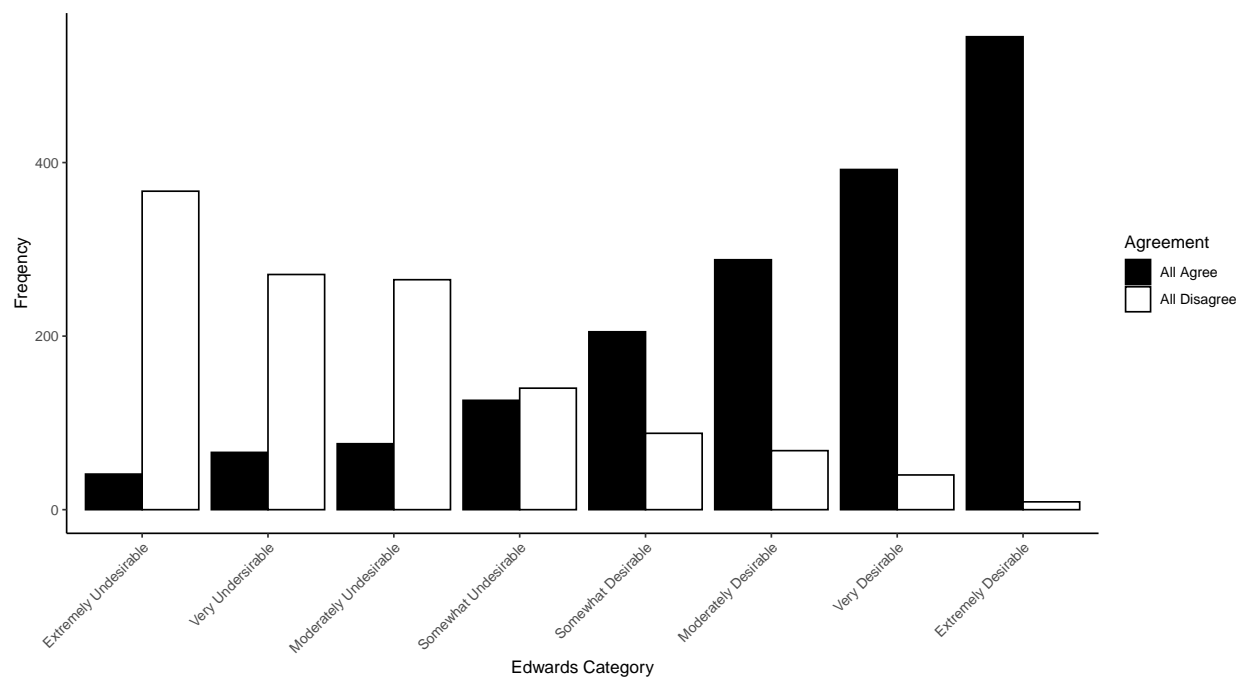


Figure 2: *Figure 2.* Rater consistency of agreement across socially desirable item groupings (all 3 agree or all 3 disagree).

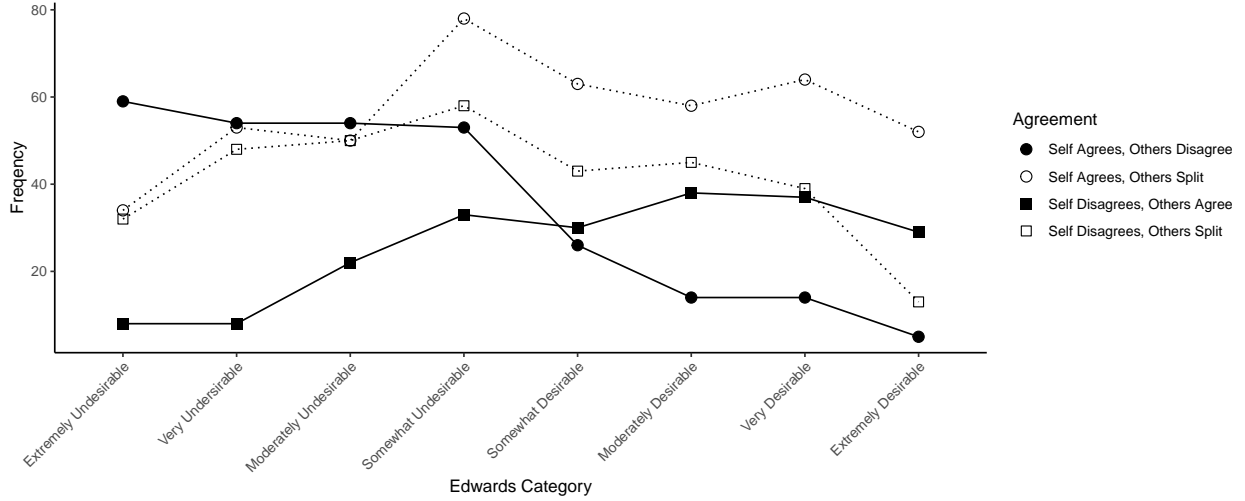


Figure 3: *Figure 3*. Patterns of divergence from self ratings.

All once- and twice-removed raters were asked how well they knew the rated person, as well as how frequently they interacted with the target. There were slight differences on responses to these questions across groups ( $\chi^2_{\text{“well-known”}} = 10.031, p = 0.018$ ;  $\chi^2_{\text{“frequently”}} = 16.907, p = 0.001$ ), but the differences were not sufficiently meaningful to justify inclusion of these variables into our analyses (87% of twice-removed and 95% of once-removed indicated they knew the rated person either “very well” or “extremely well”, although 14% of twice-removed respondents indicated they only interacted with the target once a month or less frequently compared to 2% of once-removed respondents).

The data were also screened for “not applicable” AND MISSING RESPONSE NOTE THAT “AND MISSING RESPONSE” WAS ADDED IN THIS REVISION patterns across the eight socially desirable item sets and three rater types ( $\chi^2_{(14)} = 20.375, p = 0.119$ ).

Standardized residual analysis (e.g., the cells with the largest standardized residuals being the strongest contributors to the omnibus chi-square [see, for example, Sharpe, 2015]) identified once-removed ratings with somewhat desirable (std res = 2.32), self ratings of moderately desirable (std res = -1.95), and twice-removed ratings of somewhat desirable (std res = -1.82) item sets as being the strongest omnibus chi-square contributors. In other words, there were relatively more omissions with somewhat desirable item sets for once-removed raters relative to the other two rater groups. There are however patterns of missingness that were not captured via chi-square analysis.

Chi-squares are not capturing difference - gonna do regression (perhaps questionable - 1/1/20)

Because this chi-square does not adequately capture patterns of missingness, a rater type x social desirability stratum regression was also applied to missing values ( $R^2 = 0.887$ ). Figure 4 presents these results visually, with similar patterns of missingness progressing along the social desirability continuum, but greater *numbers* of missing responses at extremely undesirable locations for twice-removed raters. Collectively, this suggests that others are less likely to endorse undesirable items for a target than are self-raters (and perhaps implicates the “self”-protective motive to be in fact stronger in others than in selves).

Actually scrap this - elevated regression line simply means less knowledge of person - interesting pattern is elevation for socially undesirable for all 3 rater types <- this should be acknowledged somewhere...

We want to expand this figure by including **quanteda** text analyses (or careless responses). Plan is: 1) transpose raw data files 2) apply **quanteda** analyses 3) compute NA's (add up number of missing)

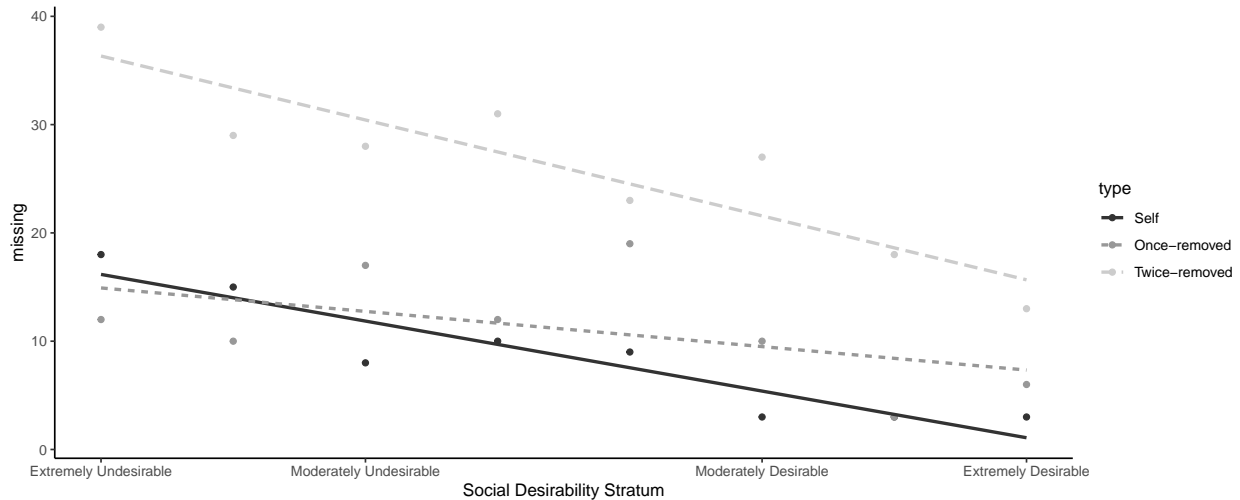


Figure 4: *Figure 4.* Smoothed (regression-predicted) missing value estimates across social desirability strata.

```
library(quanteda)
```

```
## Package version: 2.1.0
```

```
## Parallel computing: 2 of 8 threads used.
```

```
## See https://quanteda.io for tutorials and examples.
```

```
##
```

```
## Attaching package: 'quanteda'
```

```
## The following object is masked from 'package:utils':
```

```
##
```

```
## View
```

```
test <- read.csv("Observer-Rated Personality_Self1 (Fall 2019) - Copy - Copy_December 3, 2019_13.53.csv")
```

```
temp <- as.data.frame(t(test)) ## Duplicate item
```

```
temp2 <- temp[-c(1:17),]
```

```
temp3 <- temp2[-c(81:85),]
```

```
data2 <- corpus(temp3, docid_field = "V1",  
  text_field = "V1")
```

```
tab2 <- textstat_readability(data2,  
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))
```

```
#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/self1_quanteda.csv")
```

```
library(quanteda)
```

```
test <- read.csv("Observer-Rated Personality_ Self2 (Fall 2019) - Copy - Copy_December 8, 2019_09.37.csv")

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
  text_field = "V1")

tab2 <- textstat_readability(data2,
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/self2_qu")
```

```
library(quanteda)

test <- read.csv("Observer-Rated Personality_ Self3 (Fall 2019) - Copy - Copy_December 8, 2019_09.45.csv")

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
  text_field = "V1")

tab2 <- textstat_readability(data2,
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/self3_qu")
```

```
library(quanteda)

test <- read.csv("Observer-Rated Personality_ Self4 (Fall 2019) - Copy - Copy_December 8, 2019_09.54.csv")

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
  text_field = "V1")

tab2 <- textstat_readability(data2,
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/self4_qu")
```

```
test <- read.csv("Observer-Rated+Personality_+Once+Removed+1+(Fall+2019)+--+Copy+--+Copy_September+11,+2019_09.37.csv")

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
```

```

text_field = "V1")

tab2 <- textstat_readability(data2,
                             measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

write.csv(tab2, "other1_quanteda.csv", row.names = TRUE)

```

```

test <- read.csv("Observer-Rated+Personality_+Once+Removed+2+(Fall+2019)+--+Copy--+Copy_December+13,+2019")

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
                 text_field = "V1")

tab2 <- textstat_readability(data2,
                             measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/other2_q

```

```

test <- read.csv("Observer-Rated+Personality_+Once+Removed+3+(Fall+2019)+--+Copy--+Copy_December+13,+2019")

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
                 text_field = "V1")

tab2 <- textstat_readability(data2,
                             measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/other3_q

```

```

test <- read.csv("Observer-Rated Personality_ Once Removed 4 (Fall 2019) - Copy - Copy_December 8, 2019")

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
                 text_field = "V1")

tab2 <- textstat_readability(data2,
                             measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/other4_q

```

```

test <- read.csv("Observer-Rated+Personality_+Twice+Removed+1+(Fall+2019)+--+Copy--+Copy_December+11,+2019")

temp <- as.data.frame(t(test))  ## Duplicate item

```

```

temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
  text_field = "V1")

tab2 <- textstat_readability(data2,
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/twice1_q

test <- read.csv("Observer-Rated+Personality_+Twice+Removed+2+(Fall+2019)+--+Copy--+Copy_December+11,+20

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
  text_field = "V1")

tab2 <- textstat_readability(data2,
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/twice2_q

test <- read.csv("Observer-Rated+Personality_+Twice+Removed+3+(Fall+2019)+--+Copy--+Copy_December+11,+20

temp <- as.data.frame(t(test))  ## Duplicate item
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
  text_field = "V1")

tab2 <- textstat_readability(data2,
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/twice3_q

test <- read.csv("Observer-Rated+Personality_+Twice+Removed+4+(Fall+2019)+--+Copy--+Copy_December+11,+20

temp <- as.data.frame(t(test))  ## Duplicate item
View(temp)
temp2 <- temp[-c(1:17),]
temp3 <- temp2[-c(81:85),]

data2 <- corpus(temp3, docid_field = "V1",
  text_field = "V1")

tab2 <- textstat_readability(data2,
  measure = c("Flesch.Kincaid", "Dale.Chall", "ELF", "FOG.NRI"))

#write.csv(tab2, "C:/Users/stachowskia/Desktop/Work/Research/SIOP/SIOP (2021)/Missing Analysis/twice4_q

```

```

library(dplyr)
library(tidyr)

selfiflong <- read.csv("Observer-Rated Personality_ Self1 (Fall 2019) - Copy - Copy_December 3, 2019_13.1")

selfiflong_temp <- selfiflong[-c(1:2),]
# View(selfiflong_temp)

form <- c(1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
          1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
          1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
          1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
          1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
          1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
          1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
          1, 1, 1, 1)

selffother <- c("self", "self", "self", "self", "self", "self", "self", "self", "self", "self",
               "self", "self", "self", "self", "self", "self", "self", "self", "self", "self",
               "self", "self", "self", "self", "self", "self", "self", "self", "self", "self",
               "self", "self", "self", "self", "self", "self", "self", "self", "self", "self",
               "self", "self", "self", "self", "self", "self", "self", "self", "self", "self",
               "self", "self", "self", "self", "self", "self", "self", "self", "self", "self",
               "self", "self", "self", "self")

temp1 <- cbind(selfiflong_temp, form, selffother)
#View(temp1)

#Make the format "long"
combinedselfiflong <- temp1 %>%
  gather(key = "item",
         value = "responses",
         c(18:97))

#View(combinedselfiflong)

```

```

library(dplyr)
library(tidyr)

View(use_self)

#Make the format "long"
self_long <- use_self %>%
  gather(key = "item",
         value = "responses",
         c(1:80))

View(self_long)

write.csv(self_long, "self_long.csv", row.names = TRUE)

```



```
library(dplyr)
library(tidyr)

View(use_one)

#Make the format "long"
once_long <- use_one %>%
  gather(key = "item",
         value = "responses",
         c(1:80))

View(once_long)

write.csv(once_long, "once_long.csv", row.names = TRUE)
```

```
library(dplyr)
library(tidyr)

View(use_two)

#Make the format "long"
twice_long <- use_two %>%
  gather(key = "item",
         value = "responses",
         c(1:80))

View(twice_long)

write.csv(twice_long, "twice_long.csv", row.names = TRUE)
```