The 500 Family Study data

The original raw data – "500 Family Study" data – is publicly available at http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/4549?searchSource=revise&q=500+family+study. To obtain the data used in this article, follow the following steps:

Step 1. Download data

Download the DS3 and DS4 raw data (SPSS format) from the website. Use SPSS software to save the raw data as comma separated values file.

Step 2. Process data

A function for replacing missing values in the raw data with NA

We first write a simple function for dealing with the coding missing value in the raw data. All missing values are replaced with the mean

```
sim_impu <- function(DATA, M_values, repl){
  # M_values: missing values in the raw data. Some missing values are coded as 9, some are coded as 999
  # repl = T, missing values are replaced with mean.

  if(is.missing(repl)){
    repl = F
  }else{
    repl = T
  }

  nrow <- dim(DATA)[1]
  ncol <- dim(DATA)[2]
  DATA <- data.matrix(DATA)

  for(i in 1:length(M_values)){
    DATA[which(DATA == M_values[i])] <- NA
  }

  if(repl == T){

    for(n in 1:nrow){
    for(m in 1:ncol){
      if(is.na(DATA[n, m])){
          DATA[n, m] <- mean(DATA[n, ], na.rm = T)
      }
    }
   }
  }
```

```
 return(DATA)
}
```

```
#DS3 = read.csv("D:/TilburgOffice/Dropbox/tilburg office/Research SCA/Project 2 software Simultaneous/n
#DS4 = read.csv("D:/TilburgOffice/Dropbox/tilburg office/Research SCA/Project 2 software Simultaneous/n

DS3 = read.csv("D:/Dropbox/Tilburg office/Research SCA/Project 2 software Simultaneous/newdata/04549-000
DS4 = read.csv("D:/Dropbox/Tilburg office/Research SCA/Project 2 software Simultaneous/newdata/04549-000
```

```
# regarding "Please tell us how much you agree with each of the following statements about your relatio
summary(DS3[, c(352:367)])
```

```
##     UNDPAR_1        HABPAR_1        RESPAR_1        MUDPAR_1
##  Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000
##  1st Qu.:3.000   1st Qu.:1.000   1st Qu.:4.000   1st Qu.:2.000
##  Median :4.000   Median :2.000   Median :4.000   Median :3.000
##  Mean   :3.612   Mean   :2.094   Mean   :3.857   Mean   :2.897
##  3rd Qu.:4.000   3rd Qu.:3.000   3rd Qu.:5.000   3rd Qu.:4.000
##  Max.   :9.000   Max.   :9.000   Max.   :9.000   Max.   :9.000
##  NA's   :97      NA's   :101     NA's   :97      NA's   :101
##     CMTPAR_1        SUCREL_1       CONFLC_1        FINPOS_1
##  Min.   :1.000   Min.   :1.00   Min.   :1.000   Min.   :1.00
##  1st Qu.:1.000   1st Qu.:2.00   1st Qu.:3.000   1st Qu.:1.00
##  Median :2.000   Median :4.00   Median :4.000   Median :2.00
##  Mean   :2.204   Mean   :3.28   Mean   :3.692   Mean   :2.42
##  3rd Qu.:3.000   3rd Qu.:4.00   3rd Qu.:4.000   3rd Qu.:4.00
##  Max.   :9.000   Max.   :9.00   Max.   :9.000   Max.   :9.00
##  NA's   :97      NA's   :100    NA's   :103     NA's   :99
##     HNEEDS_1        LEISUR_1        HAPSEX_1        PARENT_1
##  Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.00
##  1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:1.00
##  Median :4.000   Median :4.000   Median :4.000   Median :2.00
##  Mean   :3.147   Mean   :3.379   Mean   :3.381   Mean   :2.03
##  3rd Qu.:4.000   3rd Qu.:4.000   3rd Qu.:4.000   3rd Qu.:3.00
##  Max.   :9.000   Max.   :9.000   Max.   :9.000   Max.   :9.00
##  NA's   :102     NA's   :99      NA's   :102     NA's   :103
##     NORGRT_1        OTHRLS_1        RELPRC_1        OVERAL_1
##  Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000
##  1st Qu.:2.000   1st Qu.:1.000   1st Qu.:3.000   1st Qu.:4.000
##  Median :4.000   Median :2.000   Median :4.000   Median :5.000
##  Mean   :3.308   Mean   :2.102   Mean   :3.775   Mean   :4.326
##  3rd Qu.:5.000   3rd Qu.:3.000   3rd Qu.:5.000   3rd Qu.:5.000
##  Max.   :9.000   Max.   :9.000   Max.   :9.000   Max.   :9.000
##  NA's   :103     NA's   :101     NA's   :100     NA's   :98
```