Online Supplement

Krumpal, Ivar, Ben Jann, Martin Korndörfer, and Stefan C. Schmukle (forthcoming). "Item Sum Double-List Technique: An Enhanced Design for Asking Quantitative Sensitive Questions". *Survey Research Methods*

April 16, 2018

Contents

1 Setup

The following analysis was conducted using Stata. User packages `fre` (Jann, 2007a) and `estout` (Jann, 2007b) are required to run the code. This document has been produced by `texdoc` (Jann, 2016).

The analysis script starts as follows:

```
. about

Stata/MP 15.0 for Mac (64-bit Intel)
Revision 20 Jul 2017
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Total physical memory:   16.00 GB

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. version 14.2

. clear all

. set type double
```

2 Estimation methods

Given are two random subsamples A and B of size N_A and N_B, respectively. The total sample size is $N = N_A + N_B$. There is one sensitive item S and two control items C_1 and C_2. In subsample A respondents are asked for the value of the sum of S and C_1 and for the value of C_2. In subsample B respondents are asked for the value of C_1 and the value of the sum of S and C_2. Hence, there are two response variables, Y_1 and Y_2, defined as follows:

$$Y_{1i} = \begin{cases} S_i + C_{1i} & \text{if } i \in A \\ C_{1i} & \text{if } i \in B \end{cases} \qquad Y_{2i} = \begin{cases} C_{2i} & \text{if } i \in A \\ S_i + C_{2i} & \text{if } i \in B \end{cases}$$

From Y_1 and Y_2 we can obtain two separate estimates for the population mean of S:

$$\widehat{E}_1[S] = \overline{Y}_1^A - \overline{Y}_1^B = \frac{1}{N_A}\sum_{i\in A} Y_{1i} - \frac{1}{N_B}\sum_{i\in B} Y_{1i}$$

and

$$\widehat{E}_2[S] = \overline{Y}_2^B - \overline{Y}_2^A = \frac{1}{N_B}\sum_{i\in B} Y_{2i} - \frac{1}{N_A}\sum_{i\in A} Y_{2i}$$

Averaging across the two estimates we obtain a joint estimate

$$\widehat{E}[S] = \frac{\widehat{E}_1[S] + \widehat{E}_2[S]}{2} = \frac{\left(\overline{Y}_1^A - \overline{Y}_1^B\right) + \left(\overline{Y}_2^B - \overline{Y}_2^A\right)}{2}$$

The sampling variance of $\widehat{E}[S]$ can be obtained by joint estimation of the variance matrix of the four means and then applying standard rules for linear combinations of random variables (see, e.g., Mood et al., 1974, 178–179).

In analogy to the above approach, regression coefficients for S with respect to a covariate vector $X_i = (X_{1i}, X_{2i}, \ldots, X_{ki})$ (including a constant) can be estimated by fitting two separate least-squares models,

$$Y_{1i} = G_i X_i'\beta + X_i'\gamma_1 + \epsilon_{1i} \quad \text{and} \quad Y_{2i} = (1 - G_i)X_i'\beta + X_i'\gamma_2 + \epsilon_{2i}$$

where

$$G_i = \begin{cases} 1 & \text{if } i \in A \\ 0 & \text{if } i \in B \end{cases}$$

and then averaging the β estimates from the two models. To estimate the variance matrix of the averaged β coefficients, an estimate of the joint variance matrix across the two separate coefficient vectors is needed, which can be obtained by the seemingly unrelated estimation approach (see Weesie, 1999).[1]

The above procedure averages between two separate estimates, which might not be the most efficient approach (if the subsamples are of about the same size and if C_1 and C_2 are "similar", however, averaging is a reasonable choice). An potentially more efficient approach is to estimate the two regression equations simultaneously (e.g. using Zellner's seemingly unrelated regression; Zellner, 1962), while constraining the β coefficients to be the same in both equations. Furthermore, maximum-likelihood estimation can be used. Let

$$S_i = X_i'\beta + \epsilon_i, \quad C_{1i} = X_i'\gamma_1 + \nu_{1i}, \quad C_{2i} = X_i'\gamma_2 + \nu_{2i}$$

assuming $E(\epsilon_i) = E(\nu_{1i}) = E(\nu_{2i}) = 0$ and multivariate normality of the error terms. The log-likelihood function can then be written as

$$\ln L = \sum_{i=1}^{N} \ln \ell_i$$

with

$$\begin{aligned} \ln \ell_i = {} & G_i \ln \left[\phi \left(Y_{1i} - X_i'\beta - X_i'\gamma_1, \sigma_{\epsilon+\nu_1}, Y_{2i} - X_i'\gamma_2, \sigma_{\nu_2}, \rho_{\epsilon+\nu_1,\nu_2}\right)\right] \\ & + (1 - G_i) \ln \left[\phi \left(Y_{2i} - X_i'\beta - X_i'\gamma_2, \sigma_{\epsilon+\nu_2}, Y_{1i} - X_i'\gamma_1, \sigma_{\nu_1}, \rho_{\epsilon+\nu_2,\nu_1}\right)\right] \end{aligned}$$

where $\phi(x, \sigma_x, y, \sigma_y, \rho)$ is the bivariate normal density of x and y with standard deviations σ_x and σ_y and correlation ρ. Since

$$\sigma^2_{\epsilon+\nu_1+\nu_2} = \sigma^2_{\epsilon+\nu_1} + \sigma^2_{\nu_2} + 2\sigma_{\epsilon+\nu_1}\sigma_{\nu_2}\rho_{\epsilon+\nu_1,\nu_2} = \sigma^2_{\epsilon+\nu_2} + \sigma^2_{\nu_1} + 2\sigma_{\epsilon+\nu_2}\sigma_{\nu_1}\rho_{\epsilon+\nu_2,\nu_1}$$

this can be simplified (in the sense of reducing the number of unknown parameters) to:

$$\begin{aligned} \ln \ell_i = {} & G_i \ln \left[\phi \left(Y_{1i} - X_i'\beta - X_i'\gamma_1, \sigma_{\epsilon+\nu_1}, Y_{2i} - X_i'\gamma_2, \sigma_{\nu_2}, \frac{\sigma^2_{\epsilon+\nu_1+\nu_2} - \sigma^2_{\epsilon+\nu_1} - \sigma^2_{\nu_2}}{2\sigma_{\epsilon+\nu_1}\sigma_{\nu_2}}\right)\right] \\ & + (1 - G_i) \ln \left[\phi \left(Y_{2i} - X_i'\beta - X_i'\gamma_2, \sigma_{\epsilon+\nu_2}, Y_{1i} - X_i'\gamma_1, \sigma_{\nu_1}, \frac{\sigma^2_{\epsilon+\nu_1+\nu_2} - \sigma^2_{\epsilon+\nu_2} - \sigma^2_{\nu_1}}{2\sigma_{\epsilon+\nu_2}\sigma_{\nu_1}}\right)\right] \end{aligned}$$

[1] Seemingly unrelated estimation employs robust variance estimation, which is appropriate here since the error terms ϵ_1 and ϵ_2 are heteroscedastic.

The described methods are implemented in the analysis script as follows.

```
. do isdl-programs.do

. program isdl, eclass
  1.     /*
>     estimates the mean of the sensitive variable from item sum double-list
>     data (ISDL) and from the direct questioning data (DQ), as well as the
>     difference (IDSL-DQ)
>
>     syntax:
>         isdl Y1 Y2 G [if] [in] [,
>             smax(#) c1max(#) c2max(#)
>             mean suest sureg ml quietly
>             options ]
>
>     input variables:
>         Y1:     A: S+C1, B: C1,   DQ: S
>         Y2:     A: C2,   B: S+C2, DQ: S
>         G:      group (A=1, B=2, DQ=3)
>
>     options:
>         smax():     exclude outliers in DQ larger than smax()
>         c1max():    exclude outliers in Y1 larger than smax()+c1max() (group A)
>                     or larger than c1max() (group B)
>         c2max():    exclude outliers in Y2 larger than c2max() (group A)
>                     or larger than smax()+c2max() (group B)
>         mean:       estimation using -mean-
>         suest:      estimation using -regress- and -suest-
>         sureg:      estimation using -sureg-
>         ml:         estimation using maximum likelihood
>         quietly:    do not display intermediate results
>         options:    options to be passed through to estimation command
>     */
.     syntax varlist(min=3 max=3 numeric) [if] [in] [, ///
>         smax(numlist min=1 max=1 >0 missingok) ///
>         c1max(numlist min=1 max=1 >0 missingok) ///
>         c2max(numlist min=1 max=1 >0 missingok) ///
>         mean suest sureg ml QUIetly * ]
  2.     if "`smax'"=="" local smax .
  3.     if "`c1max'"=="" local c1max .
  4.     if "`c2max'"=="" local c2max .
  5.     local model `mean' `suest' `sureg' `ml'
  6.     if `:list sizeof model'>1 {
  7.         di as err "only one of mean, suest, sureg, and ml allowed"
  8.     }
  9.     if "`model'"=="" local model mean
 10.     gettoken Y1 varlist : varlist
 11.     gettoken Y2 varlist : varlist
 12.     gettoken G  varlist : varlist
 13.     marksample touse
 14.     qui replace `touse' = 0 if `G'==1 & ///
>         (`Y1'>(`smax'+`c1max') | `Y2'>(`c2max')) & `touse'
 15.     qui replace `touse' = 0 if `G'==2 & ///
>         (`Y1'>(`c1max') | `Y2'>(`smax'+`c2max')) & `touse'
 16.     qui replace `touse' = 0 if `G'==3 & `Y1'>`smax' & `touse'
 17.     qui count if `touse'
 18.     local N = r(N)
 19.     qui count if `touse' & `G'==1
 20.     local N_A = r(N)
 21.     qui count if `touse' & `G'==2
```

```
 22.     local N_B = r(N)
 23.     qui count if `touse' & `G'==3
 24.     local N_DQ = r(N)
 25.     tempname b V
 26.     if "`model'"!="sureg" {
 27.         mat `b' = J(1,8,0)
 28.         mat coln `b' = IS1 IS2 ISDL DQ IS1-IS2 IS1-DQ IS2-DQ ISDL-DQ
 29.     }
 30.     else {
 31.         mat `b' = J(1,3,0)
 32.         mat coln `b' = ISDL DQ ISDL-DQ
 33.     }
 34.     mat `V' = `b'
 35.     if "`model'"!="mean" {
 36.         tempvar A B
 37.         qui gen byte `A' = (`G'==1) if inlist(`G',1,2) & `touse'
 38.         qui gen byte `B' = (`G'==2) if inlist(`G',1,2) & `touse'
 39.     }
 40.     if "`model'"=="mean" {
 41.         `quietly' mean `Y1' `Y2' if `touse', over(`G', nolabel) `options'
 42.         foreach exp in ///
>             "1 _b[`Y1':1]-_b[`Y1':2]" ///
>             "2 _b[`Y2':2]-_b[`Y2':1]" ///
>             "3 ((_b[`Y1':1]-_b[`Y1':2]) + (_b[`Y2':2]-_b[`Y2':1]))/2" ///
>             "4 _b[`Y1':3]" ///
>             "5 (_b[`Y1':1]-_b[`Y1':2])-(_b[`Y2':2]-_b[`Y2':1])" ///
>             "6 (_b[`Y1':1]-_b[`Y1':2])-_b[`Y1':3]" ///
>             "7 (_b[`Y2':2]-_b[`Y2':1])-_b[`Y1':3]" ///
>             "8 ((_b[`Y1':1]-_b[`Y1':2]) + (_b[`Y2':2]-_b[`Y2':1]))/2-_b[`Y1':3]" ///
>         {
 43.             gettoken i exp : exp
 44.             `quietly' lincom `exp'
 45.             mat `b'[1,`i'] = r(estimate)
 46.             mat `V'[1,`i'] = r(se)^2
 47.         }
 48.     }
 49.     else if "`model'"=="suest" {
 50.         tempname mA mB mDQ
 51.         `quietly' reg `Y1' `A' if `touse'
 52.         est sto `mA'
 53.         `quietly' reg `Y2' `B' if `touse'
 54.         est sto `mB'
 55.         `quietly' reg `Y1' if `touse' & `G'==3
 56.         est sto `mDQ'
 57.         `quietly' suest `mA' `mB' `mDQ', `options'
 58.         foreach exp in ///
>             "1 [`mA'_mean]`A'" ///
>             "2 [`mB'_mean]`B'" ///
>             "3 ([`mA'_mean]`A' + [`mB'_mean]`B')/2" ///
>             "4 [`mDQ'_mean]_cons" ///
>             "5 [`mA'_mean]`A'-[`mB'_mean]`B'" ///
>             "6 [`mA'_mean]`A'-[`mDQ'_mean]_cons" ///
>             "7 [`mB'_mean]`B'-[`mDQ'_mean]_cons" ///
>             "8 ([`mA'_mean]`A' + [`mB'_mean]`B')/2-[`mDQ'_mean]_cons" ///
>         {
 59.             gettoken i exp : exp
 60.             `quietly' lincom `exp'
 61.             mat `b'[1,`i'] = r(estimate)
 62.             mat `V'[1,`i'] = r(se)^2
 63.         }
```

```
 64.     }
 65.     else if "`model'"=="sureg" {
 66.         `quietly' nlsur (`Y1' = {S}*`A' + {C1})  (`Y2' = {S}*`B' + {C2}) ///
>             , variables(`Y1' `Y2' `A' `B') `options'
 67.         mat `b'[1,1] = el(e(b),1,1)
 68.         mat `V'[1,1] = el(e(V),1,1)
 69.         `quietly' reg `Y1' if `touse' & `G'==3, `options'
 70.         mat `b'[1,2] = el(e(b),1,1)
 71.         mat `V'[1,2] = el(e(V),1,1)
 72.         mat `b'[1,3] = `b'[1,1]-`b'[1,2]
 73.         mat `V'[1,3] = `V'[1,1]+`V'[1,2] // since samples are independent
 74.     }
 75.     else if "`model'"=="ml" {
 76.         tempname mA mB mS mDQ
 77.         qui reg `Y1' `A'
 78.         local mu1 = _b[`A']
 79.         local mu0 = _b[_cons]
 80.         local lns = ln(e(rmse))
 81.         `quietly' mlexp (`A'*lnnormalden(`Y1', {mu1}+{mu0}, exp({lns1})) + ///
>             `B'*lnnormalden(`Y1', {mu0}, exp({lns0}))) ///
>             ,  from(mu1 = `mu1' mu0 = `mu0' lns1 = `lns' lns0 = `lns') ///
>             variables(`A' `B' `Y1') `options'
 82.         local S = _b[mu1:_cons]
 83.         local C1 = _b[mu0:_cons]
 84.         local lns_1 = _b[lns0:_cons]
 85.         local lns_e1 = _b[lns1:_cons]
 86.         est sto `mA'
 87.         qui reg `Y1' `B'
 88.         local mu1 = _b[`B']
 89.         local mu0 = _b[_cons]
 90.         local lns = ln(e(rmse))
 91.         `quietly' mlexp (`B'*lnnormalden(`Y2', {mu1}+{mu0}, exp({lns1})) + ///
>             `A'*lnnormalden(`Y2', {mu0}, exp({lns0}))) ///
>             , from(mu1 = `mu1' mu0 = `mu0' lns1 = `lns' lns0 = `lns') ///
>             variables(`B' `A' `Y2') `options'
 92.         local S = (`S'+_b[mu1:_cons])/2
 93.         local C2 = _b[mu0:_cons]
 94.         local lns_2 = _b[lns0:_cons]
 95.         local lns_e2 = _b[lns1:_cons]
 96.         local lns_e12 = ln(sqrt((exp(`lns_1')^2 + exp(`lns_2')^2 + ///
>                     exp(`lns_e1')^2 + exp(`lns_e2')^2)/2))
 97.         est sto `mB'
 98.         `quietly' ml model lf isdl_lf() (S: `A' =) (C1: `Y1' =) (C2: `Y2' =) ///
>             /lns_1 /lns_2 /lns_e1 /lns_e2 /lns_e12 if `touse', max ///
>             init(`S' `C1' `C2' `lns_1' `lns_2' `lns_e1' `lns_e2' `lns_e12', copy) ///
>             search(off) `options'
 99.         `quietly' ml display
100.         est sto `mS'
101.         qui reg `Y1' if `touse' & `G'==3
102.         local b0 = _b[_cons]
103.         local lns = ln(e(rmse))
104.         `quietly' mlexp (ln(normalden(`Y1', {b0}, exp({lns})))) ///
>             if `touse' & `G'==3, variables(`Y1') ///
>             from(b0 = `b0' lns = `lns') `options'
105.         est sto `mDQ'
106.         `quietly' suest `mA' `mB' `mS' `mDQ'
107.         foreach exp in ///
>             "1 [`mA'_mu1]_cons" ///
>             "2 [`mB'_mu1]_cons" ///
>             "3 [`mS'_S]_cons" ///
```

```
>             "4 [`mDQ'_b0]_cons" ///
>             "5 [`mA'_mu1]_cons-[`mB'_mu1]_cons" ///
>             "6 [`mA'_mu1]_cons-[`mDQ'_b0]_cons" ///
>             "7 [`mB'_mu1]_cons-[`mDQ'_b0]_cons" ///
>             "8 [`mS'_S]_cons-[`mDQ'_b0]_cons" ///
>          {
108.             gettoken i exp : exp
109.             `quietly' lincom `exp'
110.             mat `b'[1,`i'] = r(estimate)
111.             mat `V'[1,`i'] = r(se)^2
112.          }
113.     }
114.     local vce `e(vce)'
115.     local vcetype `e(vcetype)'
116.     mat `V' = diag(`V')
117.     eret post `b' `V', esample(`touse') obs(`N')
118.     eret local cmd "isdl"
119.     eret local model "`model'"
120.     eret local title "Item sum double list (`model')"
121.     eret local vce `vce'
122.     eret local vcetype `vcetype'
123.     eret scalar N_A = `N_A'
124.     eret scalar N_B = `N_B'
125.     eret scalar N_DQ = `N_DQ'
126.     _coef_table_header
127.     eret display
128.     di "Group A: N = " e(N_A) ", Group B: N = " e(N_B) ", DQ: N = " e(N_DQ)
129. end

. program isdlreg, eclass
  1.     /*
>     maximum likelihood regression for item sum double list data; the first
>     equation in the output reports the coefficients for the sensitive item,
>     equation C1 and C2 report the coefficients for the control items. The lns_*
>     terms capture the different error variances (as logarithms of standard
>     deviations).
>
>     syntax:
>         isdlreg Y1 Y2 G [xvars] [if] [in] [,
>             smax(#) c1max(#) c2max(#)
>             options ]
>
>     input variables:
>         Y1:     A: S+C1, B: C1
>         Y2:     A: C2,   B: S+C2
>         G:      group (A=1, B=2)
>         xvars:  independent variables
>
>     options:
>         smax():     exclude outliers in DQ larger than smax()
>         c1max():    exclude outliers in Y1 larger than smax()+c1max() (group A)
>                     or larger than c1max() (group B)
>         c2max():    exclude outliers in Y2 larger than c2max() (group A)
>                     or larger than smax()+c2max() (group B)
>         options:    options to be passed through to estimation command
>     */
.     syntax varlist(min=3 numeric) [if] [in] [, ///
>         smax(numlist min=1 max=1 >0 missingok) ///
>         c1max(numlist min=1 max=1 >0 missingok) ///
>         c2max(numlist min=1 max=1 >0 missingok) * ]
  2.     if "`smax'"=="" local smax .
```

```
  3.     if "`c1max'"==="" local c1max .
  4.     if "`c2max'"==="" local c2max .
  5.     gettoken Y1 varlist : varlist
  6.     gettoken Y2 varlist : varlist
  7.     gettoken G  varlist : varlist
  8.     marksample touse
  9.     qui replace `touse' = 0 if `G'==1 & ///
>         (`Y1'>(`smax'+`c1max') | `Y2'>(`c2max')) & `touse'
 10.     qui replace `touse' = 0 if `G'==2 & ///
>         (`Y1'>(`c1max') | `Y2'>(`smax'+`c2max')) & `touse'
 11.     tempvar A B
 12.     qui gen byte `A' = (`G'==1) if `touse'
 13.     qui gen byte `B' = (`G'==2) if `touse'
 14.     qui count if `touse'
 15.     local N = r(N)
 16.     qui count if `touse' & `A'
 17.     local N_A = r(N)
 18.     qui count if `touse' & `B'
 19.     local N_B = r(N)
 20.     ml model lf isdl_lf() (S: `A' = `varlist') ///
>         (C1: `Y1' = `varlist') (C2: `Y2' = `varlist') ///
>         /lns_1 /lns_2 /lns_e1 /lns_e2 /lns_e12 ///
>         if `touse', max `options'
 21.     eret local title "Item sum double list regression"
 22.     eret scalar N_A = `N_A'
 23.     eret scalar N_B = `N_B'
 24.     ml display
 25.     di "Group A: N = " e(N_A) ", Group B: N = " e(N_B)
 26. end

. mata:
------------------------------------------------- mata (type end to exit) -------------
: mata set matastrict on

: void isdl_lf(transmorphic scalar M, real rowvector b, real colvector lnfj)
> {   // joint ISDL estimate
>     real colvector  g, y1, y2, xb, xb1, xb2
>     real scalar     s_1, s_2, s_e1, s_e2, s_e12, rho_e1_2, rho_e2_1
>
>     g       = moptimize_util_depvar(M, 1)
>     y1      = moptimize_util_depvar(M, 2)
>     y2      = moptimize_util_depvar(M, 3)
>     xb      = moptimize_util_xb(M, b, 1)  // coefficients of S
>     xb1     = moptimize_util_xb(M, b, 2)  // coefficients of C1
>     xb2     = moptimize_util_xb(M, b, 3)  // coefficients of C2
>     s_1     = exp(moptimize_util_xb(M, b, 4)[1])
>     s_2     = exp(moptimize_util_xb(M, b, 5)[1])
>     s_e1    = exp(moptimize_util_xb(M, b, 6)[1])
>     s_e2    = exp(moptimize_util_xb(M, b, 7)[1])
>     s_e12   = exp(moptimize_util_xb(M, b, 8)[1])
>
>     rho_e1_2 = (s_e12^2 - s_e1^2 - s_2^2) / (2 * s_e1 * s_2)
>     rho_e2_1 = (s_e12^2 - s_e2^2 - s_1^2) / (2 * s_e2 * s_1)
>     lnfj =     g :* ln(binormalden(y1-xb-xb1, s_e1, y2-xb2, s_2, rho_e1_2)) +
>         (1 :- g) :* ln(binormalden(y2-xb-xb2, s_e2, y1-xb1, s_1, rho_e2_1))
> }

: real colvector binormalden(real colvector x, real scalar sx, real colvector y,
>     real scalar sy, real scalar r)
> {
>     return(1/(2*pi()*sx*sy*sqrt(1-r^2)) * exp(-1/(2*(1-r^2)) *
>         (x:^2/sx^2 :+ y:^2/sy^2 :- 2*r*(x:*y)/(sx*sy))))
```

```
> }
: end
```

```
.
end of do-file
```

3 Data

The data of this study can be obtained from the homepage of the LISS Panel (study no. 129; see `https://www.dataarchive.lissdata.nl/study_units/view/543`; background variables have to be merged from a separate dataset available from `https://www.dataarchive.lissdata.nl/study_units/view/322`).

```
. // questionnaire data
. use ../data/kv14a_EN_1.0p.dta, clear
. // background variables (May 2014)
. merge 1:1 nomem_encr using ../data/avars_201405_EN_1.0p.dta, keep(match master)
```

Result	# of obs.	
not matched	2	
from master	2	(_merge==1)
from using	0	(_merge==2)
matched	6,546	(_merge==3)

```
. drop if _merge==1
(2 observations deleted)
. drop _merge
. quietly compress
. describe
Contains data from ../data/kv14a_EN_1.0p.dta
  obs:         6,546
 vars:            63
 size:     1,184,826
```

variable name	storage type	display format	value label	variable label
nomem_encr	long	%10.0g		Number of the household member encrypted
kv14a_m	long	%10.0g		Year and month of the field work period
kv14a001	byte	%10.0g	kv14a001	Experimental group
kv14a002	int	%10.0g		Question 1: How many days did your last holiday trip take? / Question 2: Please
kv14a003	int	%10.0g		Question 1: How many times did you visit a restaurant last year? / Question 2: H
kv14a004	int	%10.0g		How many hours did you work last week?
kv14a005	int	%10.0g		How many cultural events (e.g. movies, concerts, theater, readings) did you go t
kv14a006	long	%10.0g		Question 1: How many hours did you work last week? / Question 2: Please think of

kv14a007	int	%10.0g		Question 1: How many cultural events (e.g. movies, concerts, theater, readings)
kv14a008	long	%10.0g		How many days did your last holiday trip take?
kv14a009	long	%10.0g		How many times did you visit a restaurant last year?
kv14a010	int	%10.0g		How many cultural events (e.g. movies, concerts, theater, readings) did you go t
kv14a011	int	%10.0g		How many times did you visit a restaurant last year?
kv14a012	double	%10.0g		How many different sexual partners have you had up to now?
kv14a013	byte	%10.0g		How many hours did you work last week?
kv14a014	int	%10.0g		How many days did your last holiday trip take?
kv14a015	int	%10.0g		Please think of the last 14 days. On how many of these days have you been watchi
kv14a016	byte	%10.0g	kv14a016	Are you in a relationship at the moment?
kv14a017	long	%10.0g		In your estimation, how many hours per week are you on the internet?
kv14a018	byte	%10.0g		What is your estimate of the percentage of people in your ENTIRE circle of acqua
kv14a019	byte	%10.0g	kv14a019	Please indicate to what extent you agree with the following statement: It is wro
kv14a020	byte	%10.0g	kv14a020	Was it difficult to answer the questions?
kv14a021	byte	%10.0g	kv14a021	Were the questions sufficiently clear?
kv14a022	byte	%10.0g	kv14a022	Did the questionnaire get you thinking about things?
kv14a023	byte	%10.0g	kv14a023	Was it an interesting subject?
kv14a024	byte	%10.0g	kv14a024	Did you enjoy answering the questions?
kv14a025	str10	%10s		Starting date questionnaire
kv14a026	double	%10.0g		Starting time questionnaire
kv14a027	str10	%10s		End date questionnaire
kv14a028	double	%10.0g		End time questionnaire
kv14a029	double	%10.0g		Duration in seconds
nohouse_encr	long	%10.0g		Number of household encrypted
wave	long	%10.0g		Year and month of the field work period
geslacht	byte	%10.0g	geslacht	Gender
positie	byte	%10.0g	positie	Position within the household
gebjaar	int	%10.0g		Year of birth
leeftijd	byte	%10.0g		Age of the household member
lftdcat	byte	%10.0g	lftdcat	Age in CBS (Statistics Netherlands) categories
lftdhhh	byte	%10.0g		Age of the household head
aantalhh	byte	%10.0g	aantalhh	Number of household members
aantalki	byte	%10.0g	aantalki	Number of living-at-home children in the household, children of the household he
partner	byte	%10.0g	partner	The household head lives together with a partner (wedded or unwedded)
burgstat	byte	%10.0g	burgstat	Civil status
woonvorm	byte	%10.0g	woonvorm	Domestic situation
woning	byte	%10.0g	woning	Type of dwelling that the household inhabits
sted	byte	%10.0g	sted	Urban character of place of residence
belbezig	byte	%10.0g	belbezig	Primary occupation
brutoink	long	%10.0g	brutoink	Personal gross monthly income in Euros
brutoink_f	double	%10.0g		Personal gross monthly income in Euros,

```
                                                  imputed
nettoink        long    %10.0g     nettoink   Personal net monthly income in Euros
                                                  (incl. nettocat)
netinc          long    %10.0g     netinc     Personal net monthly income in Euros
nettoink_f      double  %10.0g                Personal net monthly income in Euros,
                                                  imputed
brutocat        byte    %10.0g     brutocat   Personal gross monthly income in
                                                  categories
nettocat        byte    %10.0g     nettocat   Personal net monthly income in categories
brutohh_f       double  %10.0g                Gross household income in Euros
nettohh_f       double  %10.0g                Net household income in Euros
oplzon          byte    %10.0g     oplzon     Highest level of education irrespective
                                                  of diploma
oplmet          byte    %10.0g     oplmet     Highest level of education with diploma
oplcat          byte    %10.0g     oplcat     Level of education in CBS (Statistics
                                                  Netherlands) categories
doetmee         byte    %10.0g     doetmee    Household member participates in the
                                                  panel
werving         byte    %10.0g     werving    From which recruitment wave the household
                                                  originates
herkomstgroep   int     %10.0g     herkomstgroep
                                                Origin
simpc           byte    %10.0g     simpc      Does the household have a simPC?
-------------------------------------------------------------------------------
Sorted by: nomem_encr
     Note: Dataset has changed since last saved.
```

3.1 Experimental groups

```
. fre kv14a001
```

kv14a001 — Experimental group

		Freq.	Percent	Valid	Cum.
Valid	1 group 1	2633	40.22	40.22	40.22
	2 group 2	2580	39.41	39.41	79.64
	3 control group	1333	20.36	20.36	100.00
	Total	6546	100.00	100.00	

```
. rename kv14a001 group
```

3.2 ISDL question on lifetime sexual partners

```
. // - long list 1 (group A)
. fre kv14a003, t(5)
```

kv14a003 — Question 1: How many times did you visit a restaurant last year? / Question 2: H

		Freq.	Percent	Valid	Cum.
Valid	0	133	2.03	5.05	5.05
	1	114	1.74	4.33	9.38
	2	166	2.54	6.31	15.69

	3	161	2.46	6.12	21.81
	4	181	2.77	6.88	28.69
	:	:	:	:	:
	150	4	0.06	0.15	99.73
	158	2	0.03	0.08	99.81
	200	3	0.05	0.11	99.92
	300	1	0.02	0.04	99.96
	410	1	0.02	0.04	100.00
	Total	2632	40.21	100.00	
Missing	.	3914	59.79		
Total		6546	100.00		

```
. assert kv14a003>=. if group!=1

. generate sex1 = kv14a003 if kv14a003>=0 & kv14a003<.
(3,914 missing values generated)

. // - short list 1 (group B)
. fre kv14a009, t(5)
```

kv14a009 ── How many times did you visit a restaurant last year?

		Freq.	Percent	Valid	Cum.
Valid	0	230	3.51	8.93	8.93
	1	115	1.76	4.47	13.40
	2	253	3.86	9.83	23.22
	3	197	3.01	7.65	30.87
	4	222	3.39	8.62	39.50
	:	:	:	:	:
	125	1	0.02	0.04	99.69
	150	2	0.03	0.08	99.77
	200	4	0.06	0.16	99.92
	300	1	0.02	0.04	99.96
	3212323	1	0.02	0.04	100.00
	Total	2575	39.34	100.00	
Missing	.	3971	60.66		
Total		6546	100.00		

```
. assert kv14a009>=. if group!=2

. replace sex1 = kv14a009 if kv14a009>=0 & kv14a009<.
(2,575 real changes made)

. // - short list 1 (DQ)
. fre kv14a011, t(5)
```

kv14a011 ── How many times did you visit a restaurant last year?

		Freq.	Percent	Valid	Cum.
Valid	0	82	1.25	6.15	6.15
	1	60	0.92	4.50	10.65
	2	133	2.03	9.98	20.63
	3	95	1.45	7.13	27.76
	4	110	1.68	8.25	36.01
	:	:	:	:	:
	75	3	0.05	0.23	99.25
	90	1	0.02	0.08	99.32
	100	7	0.11	0.53	99.85
	150	1	0.02	0.08	99.92
	200	1	0.02	0.08	100.00
	Total	1333	20.36	100.00	

Missing	.	5213	79.64
Total		6546	100.00

```
. assert kv14a011>=. if group!=3

. // - long list 2 (group B)
. fre kv14a007, t(5)
```

kv14a007 — Question 1: How many cultural events (e.g. movies, concerts, theater, readi
> ngs)

		Freq.	Percent	Valid	Cum.
Valid	-11	1	0.02	0.04	0.04
	0	339	5.18	13.16	13.20
	1	289	4.41	11.22	24.42
	2	248	3.79	9.63	34.05
	3	220	3.36	8.54	42.59
	:	:	:	:	:
	480	1	0.02	0.04	99.84
	775	1	0.02	0.04	99.88
	2012	1	0.02	0.04	99.92
	2500	1	0.02	0.04	99.96
	12333	1	0.02	0.04	100.00
	Total	2576	39.35	100.00	
Missing	.	3970	60.65		
Total		6546	100.00		

```
. assert kv14a007>=. if group!=2

. generate sex2 = kv14a007 if kv14a007>=0 & kv14a007<.
(3,971 missing values generated)

. // - short list 2 (group A)
. fre kv14a005, t(5)
```

kv14a005 — How many cultural events (e.g. movies, concerts, theater, readings) did you
> go t

		Freq.	Percent	Valid	Cum.
Valid	0	598	9.14	22.73	22.73
	1	244	3.73	9.27	32.00
	2	363	5.55	13.80	45.80
	3	256	3.91	9.73	55.53
	4	204	3.12	7.75	63.28
	:	:	:	:	:
	60	2	0.03	0.08	99.85
	75	1	0.02	0.04	99.89
	100	1	0.02	0.04	99.92
	123	1	0.02	0.04	99.96
	3865	1	0.02	0.04	100.00
	Total	2631	40.19	100.00	
Missing	.	3915	59.81		
Total		6546	100.00		

```
. assert kv14a005>=. if group!=1

. replace sex2 = kv14a005 if kv14a005>=0 & kv14a005<.
(2,631 real changes made)

. // - short list 2 (DQ)
. fre kv14a010, t(5)
```

kv14a010 — How many cultural events (e.g. movies, concerts, theater, readings) did you
> go t

		Freq.	Percent	Valid	Cum.
Valid	0	320	4.89	24.01	24.01
	1	135	2.06	10.13	34.13
	2	180	2.75	13.50	47.64
	3	130	1.99	9.75	57.39
	4	87	1.33	6.53	63.92
	:	:	:	:	:
	70	1	0.02	0.08	99.70
	75	1	0.02	0.08	99.77
	80	1	0.02	0.08	99.85
	100	1	0.02	0.08	99.92
	120	1	0.02	0.08	100.00
	Total	1333	20.36	100.00	
Missing	.	5213	79.64		
Total		6546	100.00		

```
. assert kv14a010>=. if group!=3

. // - sensitive question (DQ)
. fre kv14a012, t(5)
```

kv14a012 — How many different sexual partners have you had up to now?

		Freq.	Percent	Valid	Cum.
Valid	0	246	3.76	18.45	18.45
	1	486	7.42	36.46	54.91
	2	158	2.41	11.85	66.77
	3	100	1.53	7.50	74.27
	4	59	0.90	4.43	78.69
	:	:	:	:	:
	100	1	0.02	0.08	99.55
	150	3	0.05	0.23	99.77
	200	1	0.02	0.08	99.85
	1000000	1	0.02	0.08	99.92
	8.576e+09	1	0.02	0.08	100.00
	Total	1333	20.36	100.00	
Missing	.	5213	79.64		
Total		6546	100.00		

```
. assert kv14a012>=. if group!=3

. replace sex1 = kv14a012 if kv14a012>=0 & kv14a012<.
(1,333 real changes made)

. replace sex2 = kv14a012 if kv14a012>=0 & kv14a012<.
(1,333 real changes made)

. fre sex1 sex2, t(5)
```

sex1

		Freq.	Percent	Valid	Cum.
Valid	0	609	9.30	9.31	9.31
	1	715	10.92	10.93	20.24
	2	577	8.81	8.82	29.07
	3	458	7.00	7.00	36.07

	4	462	7.06	7.06	43.13
	:	:	:	:	:
	300	2	0.03	0.03	99.94
	410	1	0.02	0.02	99.95
	1000000	1	0.02	0.02	99.97
	3212323	1	0.02	0.02	99.98
	8.576e+09	1	0.02	0.02	100.00
	Total	6540	99.91	100.00	
Missing	.	6	0.09		
Total		6546	100.00		

sex2

		Freq.	Percent	Valid	Cum.
Valid	0	1183	18.07	18.09	18.09
	1	1019	15.57	15.58	33.67
	2	769	11.75	11.76	45.44
	3	576	8.80	8.81	54.24
	4	460	7.03	7.03	61.28
	:	:	:	:	:
	2500	1	0.02	0.02	99.94
	3865	1	0.02	0.02	99.95
	12333	1	0.02	0.02	99.97
	1000000	1	0.02	0.02	99.98
	8.576e+09	1	0.02	0.02	100.00
	Total	6539	99.89	100.00	
Missing	.	7	0.11		
Total		6546	100.00		

3.3 ISDL question on pornography consumption

```
. // - long list 1 (group A)
. fre kv14a002, t(5)
```

kv14a002 — Question 1: How many days did your last holiday trip take? / Question 2: Pl
> ease

		Freq.	Percent	Valid	Cum.
Valid	0	188	2.87	7.14	7.14
	1	14	0.21	0.53	7.67
	2	45	0.69	1.71	9.38
	3	121	1.85	4.60	13.98
	4	159	2.43	6.04	20.02
	:	:	:	:	:
	150	1	0.02	0.04	99.77
	200	1	0.02	0.04	99.81
	365	3	0.05	0.11	99.92
	366	1	0.02	0.04	99.96
	847	1	0.02	0.04	100.00
	Total	2633	40.22	100.00	
Missing	.	3913	59.78		
Total		6546	100.00		

```
. assert kv14a002>=. if group!=1
```

```
. generate porn1 = kv14a002 if kv14a002>=0 & kv14a002<1000
(3,913 missing values generated)

. // - short list 1 (group B)
. fre kv14a008, t(5)

kv14a008 ── How many days did your last holiday trip take?
```

		Freq.	Percent	Valid	Cum.
Valid	0	141	2.15	5.48	5.48
	1	10	0.15	0.39	5.86
	2	55	0.84	2.14	8.00
	3	144	2.20	5.59	13.59
	4	175	2.67	6.80	20.39
	:	:	:	:	:
	150	2	0.03	0.08	99.65
	180	1	0.02	0.04	99.69
	244	1	0.02	0.04	99.73
	365	6	0.09	0.23	99.96
	2.133e+08	1	0.02	0.04	100.00
	Total	2575	39.34	100.00	
Missing	.	3971	60.66		
Total		6546	100.00		

```
. assert kv14a008>=. if group!=2

. replace porn1 = kv14a008 if kv14a008>=0 & kv14a008<1000
(2,574 real changes made)

. // - short list 1 (DQ)
. fre kv14a014, t(5)

kv14a014 ── How many days did your last holiday trip take?
```

		Freq.	Percent	Valid	Cum.
Valid	0	95	1.45	7.13	7.13
	1	7	0.11	0.53	7.65
	2	23	0.35	1.73	9.38
	3	83	1.27	6.23	15.60
	4	84	1.28	6.30	21.91
	:	:	:	:	:
	60	1	0.02	0.08	99.25
	63	1	0.02	0.08	99.32
	90	3	0.05	0.23	99.55
	120	1	0.02	0.08	99.62
	365	5	0.08	0.38	100.00
	Total	1333	20.36	100.00	
Missing	.	5213	79.64		
Total		6546	100.00		

```
. assert kv14a014>=. if group!=3

. // - long list 2 (group B)
. fre kv14a006, t(5)

kv14a006 ── Question 1: How many hours did you work last week? / Question 2: Please thi
> nk of
```

	Freq.	Percent	Valid	Cum.

Valid	-8	1	0.02	0.04	0.04
	0	878	13.41	34.03	34.07
	1	43	0.66	1.67	35.74
	2	36	0.55	1.40	37.13
	3	26	0.40	1.01	38.14
	:	:	:	:	:
	111	1	0.02	0.04	99.84
	112	1	0.02	0.04	99.88
	150	1	0.02	0.04	99.92
	160	1	0.02	0.04	99.96
	300000	1	0.02	0.04	100.00
	Total	2580	39.41	100.00	
Missing	.	3966	60.59		
Total		6546	100.00		

```
. assert kv14a006>=. if group!=2

. generate porn2 = kv14a006 if kv14a006>=0 & kv14a006<1000
(3,968 missing values generated)

. // - short list 2 (group A)
. fre kv14a004, t(5)
```

kv14a004 — How many hours did you work last week?

		Freq.	Percent	Valid	Cum.
Valid	0	987	15.08	37.51	37.51
	1	4	0.06	0.15	37.67
	2	31	0.47	1.18	38.84
	3	18	0.27	0.68	39.53
	4	27	0.41	1.03	40.55
	:	:	:	:	:
	78	1	0.02	0.04	99.73
	80	4	0.06	0.15	99.89
	85	1	0.02	0.04	99.92
	90	1	0.02	0.04	99.96
	123	1	0.02	0.04	100.00
	Total	2631	40.19	100.00	
Missing	.	3915	59.81		
Total		6546	100.00		

```
. assert kv14a004>=. if group!=1

. replace porn2 = kv14a004 if kv14a004>=0 & kv14a004<1000
(2,631 real changes made)

. // - short list 2 (DQ)
. fre kv14a013, t(5)
```

kv14a013 — How many hours did you work last week?

		Freq.	Percent	Valid	Cum.
Valid	0	509	7.78	38.18	38.18
	1	2	0.03	0.15	38.33
	2	7	0.11	0.53	38.86
	3	9	0.14	0.68	39.53
	4	8	0.12	0.60	40.14
	:	:	:	:	:
	60	10	0.15	0.75	99.10
	62	1	0.02	0.08	99.17
	65	1	0.02	0.08	99.25

	70	6	0.09	0.45	99.70
	80	4	0.06	0.30	100.00
	Total	1333	20.36	100.00	
Missing	.	5213	79.64		
Total		6546	100.00		

```
. assert kv14a013>=. if group!=3

. // - sensitive question (DQ)
. fre kv14a015, t(5)

kv14a015 ── Please think of the last 14 days. On how many of these days have you been w
> atchi
```

		Freq.	Percent	Valid	Cum.
Valid	0	1052	16.07	78.92	78.92
	1	77	1.18	5.78	84.70
	2	64	0.98	4.80	89.50
	3	41	0.63	3.08	92.57
	4	23	0.35	1.73	94.30
	:	:	:	:	:
	12	5	0.08	0.38	98.87
	13	2	0.03	0.15	99.02
	14	10	0.15	0.75	99.77
	15	2	0.03	0.15	99.92
	1000	1	0.02	0.08	100.00
	Total	1333	20.36	100.00	
Missing	.	5213	79.64		
Total		6546	100.00		

```
. assert kv14a015>=. if group!=3

. replace porn1 = kv14a015 if kv14a015>=0 & kv14a015<1000
(1,332 real changes made)

. replace porn2 = kv14a015 if kv14a015>=0 & kv14a015<1000
(1,332 real changes made)

. fre porn1 porn2, t(5)

porn1
```

		Freq.	Percent	Valid	Cum.
Valid	0	1381	21.10	21.12	21.12
	1	101	1.54	1.54	22.66
	2	164	2.51	2.51	25.17
	3	306	4.67	4.68	29.85
	4	357	5.45	5.46	35.31
	:	:	:	:	:
	200	1	0.02	0.02	99.82
	244	1	0.02	0.02	99.83
	365	9	0.14	0.14	99.97
	366	1	0.02	0.02	99.98
	847	1	0.02	0.02	100.00
	Total	6539	99.89	100.00	
Missing	.	7	0.11		
Total		6546	100.00		

porn2

		Freq.	Percent	Valid	Cum.
Valid	0	2917	44.56	44.60	44.60
	1	124	1.89	1.90	46.49
	2	131	2.00	2.00	48.49
	3	85	1.30	1.30	49.79
	4	99	1.51	1.51	51.31
	:	:	:	:	:
	111	1	0.02	0.02	99.94
	112	1	0.02	0.02	99.95
	123	1	0.02	0.02	99.97
	150	1	0.02	0.02	99.98
	160	1	0.02	0.02	100.00
	Total	6541	99.92	100.00	
Missing	.	5	0.08		
Total		6546	100.00		

3.4 Definition of predictors

```
. fre kv14a016
```

kv14a016 — Are you in a relationship at the moment?

		Freq.	Percent	Valid	Cum.
Valid	1 yes	4917	75.11	75.19	75.19
	2 no	1622	24.78	24.81	100.00
	Total	6539	99.89	100.00	
Missing	.	7	0.11		
Total		6546	100.00		

```
. gen byte relation = (kv14a016==1) if kv14a016<.
(7 missing values generated)
. fre relation
```

relation

		Freq.	Percent	Valid	Cum.
Valid	0	1622	24.78	24.81	24.81
	1	4917	75.11	75.19	100.00
	Total	6539	99.89	100.00	
Missing	.	7	0.11		
Total		6546	100.00		

```
. fre kv14a019
```

kv14a019 — Please indicate to what extent you agree with the following statement: It i
> s wro

		Freq.	Percent	Valid	Cum.
Valid	1 strongly disagree	1119	17.09	17.12	17.12
	2 disagree	2025	30.93	30.97	48.09
	3 partly disagree, partly agree	2315	35.37	35.41	83.50
	4 agree	554	8.46	8.47	91.97
	5 strongly agree	525	8.02	8.03	100.00

	Total	6538	99.88	100.00
Missing	.	8	0.12	
Total		6546	100.00	

```
. gen byte pornwrong = inlist(kv14a019,4,5) if kv14a019<.
(8 missing values generated)

. fre pornwrong

pornwrong
```

		Freq.	Percent	Valid	Cum.
Valid	0	5459	83.39	83.50	83.50
	1	1079	16.48	16.50	100.00
	Total	6538	99.88	100.00	
Missing	.	8	0.12		
Total		6546	100.00		

```
. fre kv14a018, t(5)

kv14a018 ── What is your estimate of the percentage of people in your ENTIRE circle of
> acqua
```

		Freq.	Percent	Valid	Cum.
Valid	0	1513	23.11	23.14	23.14
	1	300	4.58	4.59	27.73
	2	216	3.30	3.30	31.03
	3	75	1.15	1.15	32.18
	4	21	0.32	0.32	32.50
	:	:	:	:	:
	95	32	0.49	0.49	98.82
	97	3	0.05	0.05	98.87
	98	4	0.06	0.06	98.93
	99	18	0.27	0.28	99.20
	100	52	0.79	0.80	100.00
	Total	6539	99.89	100.00	
Missing	.	7	0.11		
Total		6546	100.00		

```
. rename kv14a018 pornpct

. fre geslacht

geslacht ── Gender
```

		Freq.	Percent	Valid	Cum.
Valid	1 Male	3015	46.06	46.06	46.06
	2 Female	3531	53.94	53.94	100.00
	Total	6546	100.00	100.00	

```
. gen byte female = (geslacht==2) if geslacht<.

. fre female

female
```

		Freq.	Percent	Valid	Cum.
Valid	0	3015	46.06	46.06	46.06

1	3531	53.94	53.94	100.00
Total	6546	100.00	100.00	

```
. fre leeftijd, t(5)
```

leeftijd — Age of the household member

		Freq.	Percent	Valid	Cum.
Valid	16	66	1.01	1.01	1.01
	17	72	1.10	1.10	2.11
	18	74	1.13	1.13	3.24
	19	84	1.28	1.28	4.52
	20	96	1.47	1.47	5.99
	:	:	:	:	:
	89	4	0.06	0.06	99.85
	90	6	0.09	0.09	99.94
	91	2	0.03	0.03	99.97
	92	1	0.02	0.02	99.98
	94	1	0.02	0.02	100.00
	Total	6546	100.00	100.00	

```
. rename leeftijd age
. fre oplcat
```

oplcat — Level of education in CBS (Statistics Netherlands) categories

		Freq.	Percent	Valid	Cum.
Valid	1 primary school	560	8.55	8.59	8.59
	2 vmbo (intermediate secondary education, US: junior high school)	1485	22.69	22.78	31.37
	3 havo/vwo (higher secondary education/preparatory university education, US: senio	770	11.76	11.81	43.18
	4 mbo (intermediate vocational education, US: junior college)	1560	23.83	23.93	67.11
	5 hbo (higher vocational education, US: college)	1483	22.66	22.75	89.86
	6 wo (university)	661	10.10	10.14	100.00
	Total	6519	99.59	100.00	
Missing	.	27	0.41		
Total		6546	100.00		

```
. rename oplcat educ
```

4 Results

4.1 Lifetime sexual partners (Table 2)

```
. // - have a look at ouliers
. fre sex1 sex2 if group==1, t(5) // sex1: S+restaurants, sex2: events
```

sex1

		Freq.	Percent	Valid	Cum.
Valid	0	133	5.05	5.05	5.05
	1	114	4.33	4.33	9.38
	2	166	6.30	6.31	15.69
	3	161	6.11	6.12	21.81
	4	181	6.87	6.88	28.69
	:	:	:	:	:
	150	4	0.15	0.15	99.73
	158	2	0.08	0.08	99.81
	200	3	0.11	0.11	99.92
	300	1	0.04	0.04	99.96
	410	1	0.04	0.04	100.00
	Total	2632	99.96	100.00	
Missing	.	1	0.04		
Total		2633	100.00		

sex2

		Freq.	Percent	Valid	Cum.
Valid	0	598	22.71	22.73	22.73
	1	244	9.27	9.27	32.00
	2	363	13.79	13.80	45.80
	3	256	9.72	9.73	55.53
	4	204	7.75	7.75	63.28
	:	:	:	:	:
	60	2	0.08	0.08	99.85
	75	1	0.04	0.04	99.89
	100	1	0.04	0.04	99.92
	123	1	0.04	0.04	99.96
	3865	1	0.04	0.04	100.00
	Total	2631	99.92	100.00	
Missing	.	2	0.08		
Total		2633	100.00		

```
. fre sex1 sex2 if group==2, t(5) // sex1: restaurants, sex2: S+events
```

sex1

		Freq.	Percent	Valid	Cum.
Valid	0	230	8.91	8.93	8.93
	1	115	4.46	4.47	13.40
	2	253	9.81	9.83	23.22
	3	197	7.64	7.65	30.87
	4	222	8.60	8.62	39.50
	:	:	:	:	:
	125	1	0.04	0.04	99.69
	150	2	0.08	0.08	99.77
	200	4	0.16	0.16	99.92
	300	1	0.04	0.04	99.96
	3212323	1	0.04	0.04	100.00
	Total	2575	99.81	100.00	
Missing	.	5	0.19		
Total		2580	100.00		

sex2

		Freq.	Percent	Valid	Cum.
Valid	0	339	13.14	13.17	13.17
	1	289	11.20	11.22	24.39
	2	248	9.61	9.63	34.02
	3	220	8.53	8.54	42.56
	4	197	7.64	7.65	50.21
	:	:	:	:	:
	480	1	0.04	0.04	99.84
	775	1	0.04	0.04	99.88
	2012	1	0.04	0.04	99.92
	2500	1	0.04	0.04	99.96
	12333	1	0.04	0.04	100.00
	Total	2575	99.81	100.00	
Missing	.	5	0.19		
Total		2580	100.00		

```
. fre sex1 sex2 if group==3, t(5) // S
```

sex1

		Freq.	Percent	Valid	Cum.
Valid	0	246	18.45	18.45	18.45
	1	486	36.46	36.46	54.91
	2	158	11.85	11.85	66.77
	3	100	7.50	7.50	74.27
	4	59	4.43	4.43	78.69
	:	:	:	:	:
	100	1	0.08	0.08	99.55
	150	3	0.23	0.23	99.77
	200	1	0.08	0.08	99.85
	1000000	1	0.08	0.08	99.92
	8.576e+09	1	0.08	0.08	100.00
	Total	1333	100.00	100.00	

sex2

		Freq.	Percent	Valid	Cum.
Valid	0	246	18.45	18.45	18.45
	1	486	36.46	36.46	54.91
	2	158	11.85	11.85	66.77
	3	100	7.50	7.50	74.27
	4	59	4.43	4.43	78.69
	:	:	:	:	:
	100	1	0.08	0.08	99.55
	150	3	0.23	0.23	99.77
	200	1	0.08	0.08	99.85
	1000000	1	0.08	0.08	99.92
	8.576e+09	1	0.08	0.08	100.00
	Total	1333	100.00	100.00	

```
. fre kv14a011 kv14a010 if group==3, t(5) // kv14a014: restaurants, kv14a013: events
```

kv14a011 — How many times did you visit a restaurant last year?

	Freq.	Percent	Valid	Cum.

Valid	0	82	6.15	6.15	6.15
	1	60	4.50	4.50	10.65
	2	133	9.98	9.98	20.63
	3	95	7.13	7.13	27.76
	4	110	8.25	8.25	36.01
	:	:	:	:	:
	75	3	0.23	0.23	99.25
	90	1	0.08	0.08	99.32
	100	7	0.53	0.53	99.85
	150	1	0.08	0.08	99.92
	200	1	0.08	0.08	100.00
	Total	1333	100.00	100.00	

```
kv14a010 — How many cultural events (e.g. movies, concerts, theater, readings) did you
>  go t
```

		Freq.	Percent	Valid	Cum.
Valid	0	320	24.01	24.01	24.01
	1	135	10.13	10.13	34.13
	2	180	13.50	13.50	47.64
	3	130	9.75	9.75	57.39
	4	87	6.53	6.53	63.92
	:	:	:	:	:
	70	1	0.08	0.08	99.70
	75	1	0.08	0.08	99.77
	80	1	0.08	0.08	99.85
	100	1	0.08	0.08	99.92
	120	1	0.08	0.08	100.00
	Total	1333	100.00	100.00	

```
. // - set outlier rules (observed maximum in SL or DQ, excluding obvious errors)
. local smax  = 200 // number of different sexual partners
. local c1max = 300 // number of restaurant visits last year
. local c2max = 123 // number of cultural events last year
. // - overall
. isdl sex1 sex2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') ml
Item sum double list (ml)                       Number of obs     =      6,530
```

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	3.28362	.5015795	6.55	0.000	2.300542	4.266698
IS2	3.224954	.3178523	10.15	0.000	2.601975	3.847933
ISDL	3.24355	.2383473	13.61	0.000	2.776397	3.710702
DQ	4.019534	.3119157	12.89	0.000	3.408191	4.630878
IS1-IS2	.0586655	.6524841	0.09	0.928	-1.22018	1.337511
IS1-DQ	-.7359143	.5906551	-1.25	0.213	-1.893577	.4217483
IS2-DQ	-.7945799	.445333	-1.78	0.074	-1.667417	.0782568
ISDL-DQ	-.7759845	.3925569	-1.98	0.048	-1.545382	-.0065872

```
Group A: N = 2630, Group B: N = 2569, DQ: N = 1331
. // - by sex
. isdl sex1 sex2 group if female==0, quietly smax(`smax') c1max(`c1max') c2max(`c2max')
>  ml
Item sum double list (ml)                       Number of obs     =      3,008
```

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	3.985155	.8374354	4.76	0.000	2.343812	5.626498
IS2	4.060132	.5167064	7.86	0.000	3.047406	5.072858
ISDL	4.038388	.400982	10.07	0.000	3.252477	4.824298
DQ	5.435644	.641507	8.47	0.000	4.178313	6.692974
IS1-IS2	-.0749771	1.059527	-0.07	0.944	-2.151612	2.001658
IS1-DQ	-1.450488	1.054907	-1.37	0.169	-3.518069	.6170919
IS2-DQ	-1.375511	.8237213	-1.67	0.095	-2.989975	.2389527
ISDL-DQ	-1.397256	.7565169	-1.85	0.065	-2.880002	.0854901

Group A: N = 1205, Group B: N = 1197, DQ: N = 606

```
. isdl sex1 sex2 group if female==1, quietly smax(`smax') c1max(`c1max') c2max(`c2max')
>  ml
```

Item sum double list (ml) Number of obs = 3,522

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	2.699989	.5921824	4.56	0.000	1.539333	3.860645
IS2	2.503215	.3878413	6.45	0.000	1.74306	3.26337
ISDL	2.571716	.2741584	9.38	0.000	2.034376	3.109057
DQ	2.835862	.1902591	14.91	0.000	2.462961	3.208763
IS1-IS2	.1967747	.7997546	0.25	0.806	-1.370716	1.764265
IS1-DQ	-.1358728	.6219956	-0.22	0.827	-1.354962	1.083216
IS2-DQ	-.3326475	.4319947	-0.77	0.441	-1.179342	.5140466
ISDL-DQ	-.264146	.3337085	-0.79	0.429	-.9182025	.3899105

Group A: N = 1425, Group B: N = 1372, DQ: N = 725

```
. // - alternative estimates: mean
. isdl sex1 sex2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') mean
```

Item sum double list (mean) Number of obs = 6,530

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	3.28362	.5016378	6.55	0.000	2.300428	4.266812
IS2	3.224955	.3178896	10.14	0.000	2.601903	3.848007
ISDL	3.254287	.2643642	12.31	0.000	2.736143	3.772432
DQ	4.019534	.3120093	12.88	0.000	3.408007	4.631061
IS1-IS2	.058665	.6525602	0.09	0.928	-1.22033	1.337659
IS1-DQ	-.7359143	.5907539	-1.25	0.213	-1.893771	.4219421
IS2-DQ	-.7945793	.4454252	-1.78	0.074	-1.667597	.078438
ISDL-DQ	-.7652468	.4089477	-1.87	0.061	-1.56677	.0362759

Group A: N = 2630, Group B: N = 2569, DQ: N = 1331

```
. isdl sex1 sex2 group if female==0, quietly smax(`smax') c1max(`c1max') c2max(`c2max')
>  mean
```

Item sum double list (mean) Number of obs = 3,008

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	3.985155	.8376454	4.76	0.000	2.3434	5.62691
IS2	4.060132	.5168366	7.86	0.000	3.047151	5.073113
ISDL	4.022643	.4512146	8.92	0.000	3.138279	4.907008
DQ	5.435644	.6419305	8.47	0.000	4.177483	6.693804
IS1-IS2	-.0749765	1.059793	-0.07	0.944	-2.152133	2.00218
IS1-DQ	-1.450488	1.055332	-1.37	0.169	-3.5189	.6179234

```
      IS2-DQ |  -1.375512   .8241328    -1.67   0.095    -2.990783    .2397587
     ISDL-DQ |     -1.413   .7846461    -1.80   0.072    -2.950878    .1248779
------------------------------------------------------------------------------

Group A: N = 1205, Group B: N = 1197, DQ: N = 606

. isdl sex1 sex2 group if female==1, quietly smax(`smax') c1max(`c1max') c2max(`c2max')
>  mean

Item sum double list (mean)                     Number of obs     =      3,522
------------------------------------------------------------------------------
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         IS1 |    2.699989   .5923096     4.56   0.000     1.539084    3.860895
         IS2 |    2.503215   .3879266     6.45   0.000     1.742892    3.263537
        ISDL |    2.601602   .3011441     8.64   0.000      2.01137    3.191834
          DQ |    2.835862   .1903635    14.90   0.000     2.462756    3.208968
     IS1-IS2 |     .1967746   .7999277     0.25   0.806    -1.371055    1.764604
      IS1-DQ |    -.1358728   .6221487    -0.22   0.827    -1.355262    1.083516
      IS2-DQ |    -.3326474   .4321173    -0.77   0.441    -1.179582    .5142869
     ISDL-DQ |    -.2342601   .3562668    -0.66   0.511    -.9325303    .4640101
------------------------------------------------------------------------------

Group A: N = 1425, Group B: N = 1372, DQ: N = 725

. // - alternative estimates: suest (almost identical to mean)
. isdl sex1 sex2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') suest

Item sum double list (suest)                    Number of obs     =      6,530
------------------------------------------------------------------------------
             |               Robust
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         IS1 |     3.28362   .5015799     6.55   0.000     2.300541    4.266698
         IS2 |    3.224955   .3178524    10.15   0.000     2.601976    3.847934
        ISDL |    3.254287   .2643336    12.31   0.000     2.736203    3.772372
          DQ |    4.019534   .3119159    12.89   0.000      3.40819    4.630878
     IS1-IS2 |     .058665   .6524845     0.09   0.928    -1.220181    1.337511
      IS1-DQ |    -.7359143   .5906555    -1.25   0.213    -1.893578    .4217491
      IS2-DQ |    -.7945793   .4453332    -1.78   0.074    -1.667416    .0782578
     ISDL-DQ |    -.7652468   .4088567    -1.87   0.061    -1.566591    .0360975
------------------------------------------------------------------------------

Group A: N = 2630, Group B: N = 2569, DQ: N = 1331

. // - alternative estimates: sureg (almost identical to ml)
. isdl sex1 sex2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') sureg vce(ro
> bust)

Item sum double list (sureg)                    Number of obs     =      6,530
------------------------------------------------------------------------------
             |               Robust
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        ISDL |     3.24373   .2378191    13.64   0.000     2.777613    3.709847
          DQ |    4.019534   .3120093    12.88   0.000     3.408007    4.631061
     ISDL-DQ |    -.7758044   .3923107    -1.98   0.048    -1.544719   -.0068896
------------------------------------------------------------------------------

Group A: N = 2630, Group B: N = 2569, DQ: N = 1331

. isdl sex1 sex2 group if female==0, quietly smax(`smax') c1max(`c1max') c2max(`c2max')
>  sureg vce(robust)

Item sum double list (sureg)                    Number of obs     =      3,008
------------------------------------------------------------------------------
             |               Robust
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
```

ISDL	4.037221	.4017875	10.05	0.000	3.249732	4.82471
DQ	5.435644	.6419305	8.47	0.000	4.177483	6.693804
ISDL-DQ	-1.398422	.7573031	-1.85	0.065	-2.882709	.0858647

Group A: N = 1205, Group B: N = 1197, DQ: N = 606

```
. isdl sex1 sex2 group if female==1, quietly smax(`smax') c1max(`c1max') c2max(`c2max')
>  sureg vce(robust)
```

Item sum double list (sureg) Number of obs = 3,522

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
ISDL	2.569921	.2737974	9.39	0.000	2.033288	3.106554
DQ	2.835862	.1903635	14.90	0.000	2.462756	3.208968
ISDL-DQ	-.2659412	.3334716	-0.80	0.425	-.9195335	.3876511

Group A: N = 1425, Group B: N = 1372, DQ: N = 725

4.2 Pornography consumption (Table 3)

```
. // - have a look at ouliers
. fre porn1 porn2 if group==1, t(5) // porn1: S+holidays, porn2: workhours
```

porn1

		Freq.	Percent	Valid	Cum.
Valid	0	188	7.14	7.14	7.14
	1	14	0.53	0.53	7.67
	2	45	1.71	1.71	9.38
	3	121	4.60	4.60	13.98
	4	159	6.04	6.04	20.02
	:	:	:	:	:
	150	1	0.04	0.04	99.77
	200	1	0.04	0.04	99.81
	365	3	0.11	0.11	99.92
	366	1	0.04	0.04	99.96
	847	1	0.04	0.04	100.00
	Total	2633	100.00	100.00	

porn2

		Freq.	Percent	Valid	Cum.
Valid	0	987	37.49	37.51	37.51
	1	4	0.15	0.15	37.67
	2	31	1.18	1.18	38.84
	3	18	0.68	0.68	39.53
	4	27	1.03	1.03	40.55
	:	:	:	:	:
	78	1	0.04	0.04	99.73
	80	4	0.15	0.15	99.89
	85	1	0.04	0.04	99.92
	90	1	0.04	0.04	99.96
	123	1	0.04	0.04	100.00
	Total	2631	99.92	100.00	
Missing	.	2	0.08		

Total	2633	100.00	

```
. fre porn1 porn2 if group==2, t(5) // porn1: holidays, porn2: S+workhours
```

porn1

		Freq.	Percent	Valid	Cum.
Valid	0	141	5.47	5.48	5.48
	1	10	0.39	0.39	5.87
	2	55	2.13	2.14	8.00
	3	144	5.58	5.59	13.60
	4	175	6.78	6.80	20.40
	:	:	:	:	:
	120	2	0.08	0.08	99.61
	150	2	0.08	0.08	99.69
	180	1	0.04	0.04	99.73
	244	1	0.04	0.04	99.77
	365	6	0.23	0.23	100.00
	Total	2574	99.77	100.00	
Missing	.	6	0.23		
Total		2580	100.00		

porn2

		Freq.	Percent	Valid	Cum.
Valid	0	878	34.03	34.06	34.06
	1	43	1.67	1.67	35.73
	2	36	1.40	1.40	37.12
	3	26	1.01	1.01	38.13
	4	49	1.90	1.90	40.03
	:	:	:	:	:
	90	1	0.04	0.04	99.84
	111	1	0.04	0.04	99.88
	112	1	0.04	0.04	99.92
	150	1	0.04	0.04	99.96
	160	1	0.04	0.04	100.00
	Total	2578	99.92	100.00	
Missing	.	2	0.08		
Total		2580	100.00		

```
. fre porn1 porn2 if group==3, t(5) // S
```

porn1

		Freq.	Percent	Valid	Cum.
Valid	0	1052	78.92	78.98	78.98
	1	77	5.78	5.78	84.76
	2	64	4.80	4.80	89.56
	3	41	3.08	3.08	92.64
	4	23	1.73	1.73	94.37
	:	:	:	:	:
	11	2	0.15	0.15	98.57
	12	5	0.38	0.38	98.95
	13	2	0.15	0.15	99.10
	14	10	0.75	0.75	99.85
	15	2	0.15	0.15	100.00
	Total	1332	99.92	100.00	

Missing .	1	0.08	
Total	1333	100.00	

porn2

		Freq.	Percent	Valid	Cum.
Valid	0	1052	78.92	78.98	78.98
	1	77	5.78	5.78	84.76
	2	64	4.80	4.80	89.56
	3	41	3.08	3.08	92.64
	4	23	1.73	1.73	94.37
	:	:	:	:	:
	11	2	0.15	0.15	98.57
	12	5	0.38	0.38	98.95
	13	2	0.15	0.15	99.10
	14	10	0.75	0.75	99.85
	15	2	0.15	0.15	100.00
	Total	1332	99.92	100.00	
Missing	.	1	0.08		
Total		1333	100.00		

```
. fre kv14a014 kv14a013 if group==3, t(5) // kv14a014: holidays, kv14a013: workhours
```

kv14a014 — How many days did your last holiday trip take?

		Freq.	Percent	Valid	Cum.
Valid	0	95	7.13	7.13	7.13
	1	7	0.53	0.53	7.65
	2	23	1.73	1.73	9.38
	3	83	6.23	6.23	15.60
	4	84	6.30	6.30	21.91
	:	:	:	:	:
	60	1	0.08	0.08	99.25
	63	1	0.08	0.08	99.32
	90	3	0.23	0.23	99.55
	120	1	0.08	0.08	99.62
	365	5	0.38	0.38	100.00
	Total	1333	100.00	100.00	

kv14a013 — How many hours did you work last week?

		Freq.	Percent	Valid	Cum.
Valid	0	509	38.18	38.18	38.18
	1	2	0.15	0.15	38.33
	2	7	0.53	0.53	38.86
	3	9	0.68	0.68	39.53
	4	8	0.60	0.60	40.14
	:	:	:	:	:
	60	10	0.75	0.75	99.10
	62	1	0.08	0.08	99.17
	65	1	0.08	0.08	99.25
	70	6	0.45	0.45	99.70
	80	4	0.30	0.30	100.00
	Total	1333	100.00	100.00	

```
. // - outlier rules (observed maximum in SL or DQ, excluding obvious errors)
```

```
. local smax  = 15   // days with pornography consumption (within last 14 days)
. local c1max = 365  // length of last holiday trip
. local c2max = 123  // number of hours worked last week
. // - overall
. isdl porn1 porn2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') ml
Item sum double list (ml)                       Number of obs     =      6,533
```

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	-.1285587	.5476543	-0.23	0.814	-1.201941	.944824
IS2	.0305337	.5101272	0.06	0.952	-.9692973	1.030365
ISDL	-.0434988	.3798558	-0.11	0.909	-.7880024	.7010048
DQ	.8198198	.0626768	13.08	0.000	.6969756	.942664
IS1-IS2	-.1590924	.733956	-0.22	0.828	-1.59762	1.279435
IS1-DQ	-.9483785	.5512291	-1.72	0.085	-2.028768	.1320108
IS2-DQ	-.7892861	.5139632	-1.54	0.125	-1.796635	.2180633
ISDL-DQ	-.8633186	.3849919	-2.24	0.025	-1.617889	-.1087483

```
Group A: N = 2630, Group B: N = 2571, DQ: N = 1332
. // - by sex
. isdl porn1 porn2 group if female==0, quietly smax(`smax') c1max(`c1max') c2max(`c2max
> ') ml
Item sum double list (ml)                       Number of obs     =      3,010
```

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	-.0640482	.9632942	-0.07	0.947	-1.95207	1.823974
IS2	.4388339	.8279294	0.53	0.596	-1.183878	2.061546
ISDL	.220906	.6432449	0.34	0.731	-1.039831	1.481643
DQ	1.636964	.1248034	13.12	0.000	1.392353	1.881574
IS1-IS2	-.5028821	1.233831	-0.41	0.684	-2.921147	1.915383
IS1-DQ	-1.701012	.9713452	-1.75	0.080	-3.604814	.2027898
IS2-DQ	-1.19813	.8372831	-1.43	0.152	-2.839175	.442915
ISDL-DQ	-1.416058	.6552404	-2.16	0.031	-2.700305	-.1318101

```
Group A: N = 1206, Group B: N = 1198, DQ: N = 606
. isdl porn1 porn2 group if female==1, quietly smax(`smax') c1max(`c1max') c2max(`c2max
> ') ml
Item sum double list (ml)                       Number of obs     =      3,523
```

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	-.1492851	.5854719	-0.25	0.799	-1.296789	.9982187
IS2	-.4140594	.6020182	-0.69	0.492	-1.593993	.7658746
ISDL	-.2764521	.4273223	-0.65	0.518	-1.113988	.5610842
DQ	.137741	.0310566	4.44	0.000	.0768713	.1986108
IS1-IS2	.2647743	.8227511	0.32	0.748	-1.347788	1.877337
IS1-DQ	-.2870261	.586295	-0.49	0.624	-1.436143	.8620909
IS2-DQ	-.5518004	.6028187	-0.92	0.360	-1.733303	.6297026
ISDL-DQ	-.4141931	.4284494	-0.97	0.334	-1.253938	.4255522

```
Group A: N = 1424, Group B: N = 1373, DQ: N = 726
. // - alternative estimates: mean
```

```
. isdl porn1 porn2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') mean
Item sum double list (mean)                     Number of obs     =      6,533
```

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	-.1285587	.5477187	-0.23	0.814	-1.202068	.9449502
IS2	.0305338	.5101864	0.06	0.952	-.9694131	1.030481
ISDL	-.0490125	.3813642	-0.13	0.898	-.7964725	.6984476
DQ	.8198198	.0626955	13.08	0.000	.6969389	.9427008
IS1-IS2	-.1590924	.7340417	-0.22	0.828	-1.597788	1.279603
IS1-DQ	-.9483785	.5512953	-1.72	0.085	-2.028897	.1321404
IS2-DQ	-.7892861	.5140242	-1.54	0.125	-1.796755	.2181828
ISDL-DQ	-.8688323	.3864833	-2.25	0.025	-1.626326	-.1113389

```
Group A: N = 2630, Group B: N = 2571, DQ: N = 1332
. isdl porn1 porn2 group if female==0, quietly smax(`smax') c1max(`c1max') c2max(`c2max
> ') mean
Item sum double list (mean)                     Number of obs     =      3,010
```

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	-.0640482	.9635369	-0.07	0.947	-1.952546	1.824449
IS2	.4388339	.8281365	0.53	0.596	-1.184284	2.061952
ISDL	.1873929	.65294	0.29	0.774	-1.092346	1.467132
DQ	1.636964	.1248858	13.11	0.000	1.392192	1.881735
IS1-IS2	-.5028821	1.234141	-0.41	0.684	-2.921754	1.91599
IS1-DQ	-1.701012	.9715965	-1.75	0.080	-3.605306	.2032823
IS2-DQ	-1.19813	.8375002	-1.43	0.153	-2.8396	.4433404
ISDL-DQ	-1.449571	.664776	-2.18	0.029	-2.752508	-.1466339

```
Group A: N = 1206, Group B: N = 1198, DQ: N = 606
. isdl porn1 porn2 group if female==1, quietly smax(`smax') c1max(`c1max') c2max(`c2max
> ') mean
Item sum double list (mean)                     Number of obs     =      3,523
```

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	-.1492851	.5855987	-0.25	0.799	-1.297037	.9984673
IS2	-.4140594	.6021481	-0.69	0.492	-1.594248	.7661292
ISDL	-.2816722	.4283118	-0.66	0.511	-1.121148	.5578036
DQ	.137741	.0310736	4.43	0.000	.076838	.1986441
IS1-IS2	.2647743	.822929	0.32	0.748	-1.348137	1.877686
IS1-DQ	-.2870261	.5864225	-0.49	0.625	-1.436393	.8623409
IS2-DQ	-.5518004	.6029493	-0.92	0.360	-1.733559	.6299586
ISDL-DQ	-.4194133	.4294375	-0.98	0.329	-1.261095	.4222688

```
Group A: N = 1424, Group B: N = 1373, DQ: N = 726
. // - alternative estimates: suest (almost identical to mean)
. isdl porn1 porn2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') suest
Item sum double list (suest)                    Number of obs     =      6,533
```

	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
IS1	-.1285587	.5476551	-0.23	0.814	-1.201943	.9448255
IS2	.0305338	.5101273	0.06	0.952	-.9692973	1.030365
ISDL	-.0490125	.3813199	-0.13	0.898	-.7963857	.6983608

```
          DQ |   .8198198   .0626768    13.08   0.000     .6969756     .942664
      IS1-IS2 |  -.1590924   .7339566    -0.22   0.828    -1.597621    1.279436
       IS1-DQ |  -.9483785   .5512299    -1.72   0.085    -2.028769    .1320123
       IS2-DQ |  -.7892861   .5139632    -1.54   0.125    -1.796635    .2180634
      ISDL-DQ |  -.8688323   .3864366    -2.25   0.025    -1.626234   -.1114304
------------------------------------------------------------------------------

Group A: N = 2630, Group B: N = 2571, DQ: N = 1332

. // - alternative estimates: sureg (almost identical to ml)
. isdl porn1 porn2 group, quietly smax(`smax') c1max(`c1max') c2max(`c2max') sureg vce(
> robust)

Item sum double list (sureg)                    Number of obs     =      6,533
------------------------------------------------------------------------------
             |               Robust
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        ISDL |  -.0432898   .3803312    -0.11   0.909    -.7887253    .7021457
          DQ |   .8198198   .0626955    13.08   0.000     .6969389    .9427008
     ISDL-DQ |  -.8631096   .3854641    -2.24   0.025    -1.618605   -.1076139
------------------------------------------------------------------------------

Group A: N = 2630, Group B: N = 2571, DQ: N = 1332

. isdl porn1 porn2 group if female==0, quietly smax(`smax') c1max(`c1max') c2max(`c2max
> ') sureg vce(robust)

Item sum double list (sureg)                    Number of obs     =      3,010
------------------------------------------------------------------------------
             |               Robust
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        ISDL |    .227163   .6452321     0.35   0.725    -1.037469    1.491795
          DQ |   1.636964   .1248858    13.11   0.000     1.392192    1.881735
     ISDL-DQ |  -1.409801   .6572069    -2.15   0.032    -2.697903   -.1216989
------------------------------------------------------------------------------

Group A: N = 1206, Group B: N = 1198, DQ: N = 606

. isdl porn1 porn2 group if female==1, quietly smax(`smax') c1max(`c1max') c2max(`c2max
> ') sureg vce(robust)

Item sum double list (sureg)                    Number of obs     =      3,523
------------------------------------------------------------------------------
             |               Robust
             |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        ISDL |  -.2782651   .4279946    -0.65   0.516    -1.117119     .560589
          DQ |    .137741   .0310736     4.43   0.000      .076838    .1986441
     ISDL-DQ |  -.4160061   .4291212    -0.97   0.332    -1.257068    .4250559
------------------------------------------------------------------------------

Group A: N = 1424, Group B: N = 1373, DQ: N = 726
```

4.3 Means and variances of items in direct questioning group (Table 4)

```
. describe kv14a011 kv14a010

              storage   display    value
variable name   type    format     label      variable label
------------------------------------------------------------------------------
kv14a011        int     %10.0g                How many times did you visit a restaurant
                                                last year?
```

```
kv14a010        int     %10.0g                How many cultural events (e.g. movies,
                                                concerts, theater, readings) did you go
                                                t
```

```
. summarize sex1 kv14a011 kv14a010 if group==3 & sex1<=200
```

Variable	Obs	Mean	Std. Dev.	Min	Max
sex1	1,331	4.019534	11.38299	0	200
kv14a011	1,331	10.83471	14.66697	0	200
kv14a010	1,331	5.323065	8.87766	0	120

```
. corr sex1 kv14a011 kv14a010 if group==3 & sex1<=200
(obs=1,331)
```

	sex1	kv14a011	kv14a010
sex1	1.0000		
kv14a011	0.0644	1.0000	
kv14a010	0.0373	0.1966	1.0000

```
. describe kv14a014 kv14a013
```

variable name	storage type	display format	value label	variable label
kv14a014	int	%10.0g		How many days did your last holiday trip take?
kv14a013	byte	%10.0g		How many hours did you work last week?

```
. summarize porn1 kv14a014 kv14a013 if group==3
```

Variable	Obs	Mean	Std. Dev.	Min	Max
porn1	1,332	.8198198	2.288172	0	15
kv14a014	1,333	11.04726	23.42722	0	365
kv14a013	1,333	18.41185	18.69919	0	80

```
. corr porn1 kv14a014 kv14a013 if group==3
(obs=1,332)
```

	porn1	kv14a014	kv14a013
porn1	1.0000		
kv14a014	0.0439	1.0000	
kv14a013	0.0320	-0.0476	1.0000

4.4 Proportion of zeros (Table 5)

```
. local smax  = 200 // number of different sexual partners
. local c1max = 300 // number of restaurant visits last year
. local c2max = 123 // number of cultural events last year
. generate byte sex1zero = (sex1==0) if group==1 & sex1<=(`smax'+`c1max')
(3,914 missing values generated)
. replace       sex1zero = (sex1==0) if group==2 & sex1<=(`c1max')
(2,574 real changes made)
. generate byte sex2zero = (sex2==0) if group==1 & sex1<=(`c2max')
(3,925 missing values generated)
. replace       sex2zero = (sex2==0) if group==2 & sex1<=(`smax'+`c2max')
```

```
(2,574 real changes made)

. mean sex1zero, over(group)

Mean estimation                   Number of obs    =      5,206

    _subpop_1: group = group 1
    _subpop_2: group = group 2
```

Over	Mean	Std. Err.	[95% Conf.	Interval]
sex1zero				
_subpop_1	.0505319	.0042703	.0421603	.0589036
_subpop_2	.0893551	.0056236	.0783305	.1003797

```
. lincom _subpop_1-_subpop_2

 ( 1)  [sex1zero]_subpop_1 - [sex1zero]_subpop_2 = 0
```

Mean	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
(1)	-.0388232	.0070612	-5.50	0.000	-.0526661	-.0249802

```
. mean sex2zero, over(group)

Mean estimation                   Number of obs    =      5,195

    _subpop_1: group = group 1
    _subpop_2: group = group 2
```

Over	Mean	Std. Err.	[95% Conf.	Interval]
sex2zero				
_subpop_1	.2281572	.0081984	.2120848	.2442296
_subpop_2	.1317016	.0066667	.1186321	.1447711

```
. lincom _subpop_2-_subpop_1

 ( 1)  - [sex2zero]_subpop_1 + [sex2zero]_subpop_2 = 0
```

Mean	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
(1)	-.0964556	.0105669	-9.13	0.000	-.1171711	-.07574

```
. local smax  = 15   // days with pornography consumption (within last 14 days)

. local c1max = 365  // length of last holiday trip

. local c2max = 123  // number of hours worked last week

. generate byte porn1zero = (porn1==0) if group==1 & porn1<=(`smax'+`c1max')
(3,914 missing values generated)

. replace       porn1zero = (porn1==0) if group==2 & porn1<=(`c1max')
(2,574 real changes made)

. generate byte porn2zero = (porn2==0) if group==1 & porn1<=(`c2max')
(3,923 missing values generated)

. replace       porn2zero = (porn2==0) if group==2 & porn1<=(`smax'+`c2max')
(2,564 real changes made)

. mean porn1zero, over(group)

Mean estimation                   Number of obs    =      5,206
```

```
    _subpop_1: group = group 1
    _subpop_2: group = group 2
```

Over	Mean	Std. Err.	[95% Conf.	Interval]
porn1zero				
_subpop_1	.0714286	.0050209	.0615855	.0812717
_subpop_2	.0547786	.0044859	.0459843	.0635729

```
. lincom _subpop_1-_subpop_2
 ( 1)  [porn1zero]_subpop_1 - [porn1zero]_subpop_2 = 0
```

Mean	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
(1)	.01665	.006733	2.47	0.013	.0034505	.0298495

```
. mean porn2zero, over(group)
Mean estimation                   Number of obs   =      5,187
    _subpop_1: group = group 1
    _subpop_2: group = group 2
```

Over	Mean	Std. Err.	[95% Conf.	Interval]
porn2zero				
_subpop_1	.3732368	.0094456	.3547195	.391754
_subpop_2	.3393136	.0093524	.3209789	.3576483

```
. lincom _subpop_2-_subpop_1
 ( 1)  - [porn2zero]_subpop_1 + [porn2zero]_subpop_2 = 0
```

Mean	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
(1)	-.0339232	.0132923	-2.55	0.011	-.0599818	-.0078646

4.5 Regression models (Table 6)

```
. local smax  = 200 // number of different sexual partners
. local c1max = 300 // number of restaurant visits last year
. local c2max = 123 // number of cultural events last year
. regress sex1 female age relation educ pornwrong pornpct ///
>     if group==3 & sex1<=`smax'
```

Source	SS	df	MS		
				Number of obs	= 1,326
				F(6, 1319)	= 6.70
Model	5030.31427	6	838.385711	Prob > F	= 0.0000
Residual	165152.558	1,319	125.210431	R-squared	= 0.0296
				Adj R-squared	= 0.0251
Total	170182.873	1,325	128.439904	Root MSE	= 11.19

sex1	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
female	-1.653918	.6558197	-2.52	0.012	-2.940482	-.3673548
age	.0073264	.0198588	0.37	0.712	-.0316318	.0462846
relation	-.0540257	.7255375	-0.07	0.941	-1.477359	1.369308
educ	.2830527	.2043809	1.38	0.166	-.1178943	.6839997
pornwrong	-2.165218	.8879473	-2.44	0.015	-3.907161	-.4232747
pornpct	.0415256	.0137224	3.03	0.003	.0146055	.0684457
_cons	2.916797	1.622362	1.80	0.072	-.2658942	6.099488

```
. est sto sex_DQ

. isdlreg sex1 sex2 group female age relation educ pornwrong pornpct ///
>     if inlist(group,1,2), smax(`smax') c1max(`c1max') c2max(`c2max')

initial:       log likelihood =     -<inf>  (could not be evaluated)
feasible:      log likelihood = -112288.33
rescale:       log likelihood = -60610.591
rescale eq:    log likelihood =  -51140.25
Iteration 0:   log likelihood =  -51140.25  (not concave)
Iteration 1:   log likelihood = -50363.133  (not concave)
Iteration 2:   log likelihood = -50069.567  (not concave)
Iteration 3:   log likelihood = -49982.708  (not concave)
Iteration 4:   log likelihood =  -49900.94  (not concave)
Iteration 5:   log likelihood = -49849.877  (not concave)
Iteration 6:   log likelihood = -49766.926  (not concave)
Iteration 7:   log likelihood = -49685.839  (not concave)
Iteration 8:   log likelihood = -49664.706  (not concave)
Iteration 9:   log likelihood = -49637.267  (not concave)
Iteration 10:  log likelihood = -49615.863
Iteration 11:  log likelihood = -46570.334  (not concave)
Iteration 12:  log likelihood = -46174.872  (not concave)
Iteration 13:  log likelihood = -45951.458  (not concave)
Iteration 14:  log likelihood =  -45831.72  (not concave)
Iteration 15:  log likelihood = -45642.802  (not concave)
Iteration 16:  log likelihood = -45516.949
Iteration 17:  log likelihood = -43111.104
Iteration 18:  log likelihood = -41514.927
Iteration 19:  log likelihood = -41262.361
Iteration 20:  log likelihood = -41253.754
Iteration 21:  log likelihood = -41253.714
Iteration 22:  log likelihood = -41253.714

Item sum double list regression                 Number of obs     =      5,176
                                                Wald chi2(6)      =      77.93
Log likelihood = -41253.714                     Prob > chi2       =     0.0000
```

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
S						
female	-.421466	.5008558	-0.84	0.400	-1.403125	.5601932
age	.0233052	.0151623	1.54	0.124	-.0064124	.0530229
relation	.1078618	.5505132	0.20	0.845	-.9711242	1.186848
educ	.6703593	.1610241	4.16	0.000	.3547579	.9859606
pornwrong	-2.472377	.6638831	-3.72	0.000	-3.773564	-1.17119
pornpct	.046228	.010517	4.40	0.000	.0256151	.0668409
_cons	-.8534105	1.217266	-0.70	0.483	-3.239209	1.532388
C1						
female	1.038893	.5403904	1.92	0.055	-.020253	2.098039
age	.0189937	.0163572	1.16	0.246	-.0130658	.0510532

```
    relation |   .5881653   .5922618     0.99   0.321    -.5726464    1.748977
        educ |   1.516405   .1739306     8.72   0.000     1.175507    1.857303
   pornwrong |  -1.665904   .7177548    -2.32   0.020    -3.072678   -.2591308
     pornpct |   .0815924   .0113772     7.17   0.000     .0592935    .1038914
       _cons |   1.369525   1.312201     1.04   0.297    -1.202342    3.941392
-------------+----------------------------------------------------------------
C2           |
      female |   1.019264   .2776319     3.67   0.000     .4751157    1.563413
         age |  -.0188893   .0084157    -2.24   0.025    -.0353839   -.0023948
    relation |  -1.504219   .3105972    -4.84   0.000    -2.112979   -.8954601
        educ |   .8863674    .088471    10.02   0.000     .7129675    1.059767
   pornwrong |  -.1769301   .3619561    -0.49   0.625    -.8863511    .5324909
     pornpct |   .0337965   .0057001     5.93   0.000     .0226244    .0449685
       _cons |    2.68363   .6790675     3.95   0.000     1.352682    4.014578
-------------+----------------------------------------------------------------
lns_1        |
       _cons |   2.750794   .0123342   223.02   0.000      2.72662    2.774969
-------------+----------------------------------------------------------------
lns_2        |
       _cons |   1.980166   .0136214   145.37   0.000     1.953468    2.006863
-------------+----------------------------------------------------------------
lns_e1       |
       _cons |   2.970589   .0107369   276.67   0.000     2.949545    2.991633
-------------+----------------------------------------------------------------
lns_e2       |
       _cons |    2.61624   .0128362   203.82   0.000     2.591081    2.641398
-------------+----------------------------------------------------------------
lns_e12      |
       _cons |   3.111783   .0098285   316.61   0.000     3.092519    3.131046
------------------------------------------------------------------------------
Group A: N = 2621, Group B: N = 2555

. est sto sex_ISDL

. local smax  = 15   // days with pornography consumption (within last 14 days)

. local c1max = 365  // length of last holiday trip

. local c2max = 123  // number of hours worked last week

. regress porn1 female age relation educ pornwrong pornpct ///
>     if group==3 & porn1<=`smax'

      Source |       SS           df       MS      Number of obs   =     1,327
-------------+----------------------------------   F(6, 1320)      =     68.87
       Model |  1658.3016         6   276.3836   Prob > F        =    0.0000
    Residual |  5297.65318     1,320  4.01337362   R-squared       =    0.2384
-------------+----------------------------------   Adj R-squared   =    0.2349
       Total |  6955.95479     1,326  5.24581809   Root MSE        =    2.0033

------------------------------------------------------------------------------
       porn1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      female |  -1.101318   .1173916    -9.38   0.000    -1.331613   -.8710238
         age |  -.0043481   .0035484    -1.23   0.221    -.0113093     .002613
    relation |  -.5663359   .1298689    -4.36   0.000    -.8211079    -.311564
        educ |  -.0900618   .0365534    -2.46   0.014     -.161771   -.0183527
   pornwrong |   .0376161   .1589785     0.24   0.813     -.274262    .3494943
     pornpct |   .0289783   .0024548    11.80   0.000     .0241625    .0337941
       _cons |   1.710523   .2899573     5.90   0.000     1.141695     2.27935
------------------------------------------------------------------------------

. est sto porn_DQ

. isdlreg porn1 porn2 group female age relation educ pornwrong pornpct ///
```

```
>     if inlist(group,1,2), smax(`smax') c1max(`c1max') c2max(`c2max')

initial:       log likelihood =     -<inf>  (could not be evaluated)
feasible:      log likelihood = -60264.805
rescale:       log likelihood = -60264.805
rescale eq:    log likelihood = -52076.145
Iteration 0:   log likelihood = -52076.145
Iteration 1:   log likelihood = -46076.212
Iteration 2:   log likelihood = -44681.089
Iteration 3:   log likelihood = -44665.443
Iteration 4:   log likelihood = -44665.385
Iteration 5:   log likelihood = -44665.385

Item sum double list regression                 Number of obs     =      5,178
                                                Wald chi2(6)      =      15.93
Log likelihood = -44665.385                     Prob > chi2       =     0.0141
```

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
S						
female	.0141992	.7666469	0.02	0.985	-1.488401	1.5168
age	-.0123712	.0232321	-0.53	0.594	-.0579053	.0331629
relation	.259524	.8464883	0.31	0.759	-1.399563	1.918611
educ	.2154225	.2459759	0.88	0.381	-.2666815	.6975265
pornwrong	-.2881805	1.012629	-0.28	0.776	-2.272896	1.696535
pornpct	.0444908	.016035	2.77	0.006	.0130627	.0759188
_cons	-1.388636	1.867648	-0.74	0.457	-5.049158	2.271886
C1						
female	-1.84658	.7296814	-2.53	0.011	-3.276729	-.4164304
age	.0802948	.0221066	3.63	0.000	.0369668	.1236229
relation	-.4740785	.7991156	-0.59	0.553	-2.040316	1.092159
educ	-.0724301	.2349665	-0.31	0.758	-.532956	.3880957
pornwrong	-.2775191	.970823	-0.29	0.775	-2.180297	1.625259
pornpct	.0106994	.0154078	0.69	0.487	-.0194993	.0408981
_cons	9.226492	1.772981	5.20	0.000	5.751513	12.70147
C2						
female	-5.98569	.6249393	-9.58	0.000	-7.210548	-4.760831
age	-.2442986	.0189428	-12.90	0.000	-.2814259	-.2071713
relation	2.644212	.6976397	3.79	0.000	1.276864	4.011561
educ	2.023547	.1993695	10.15	0.000	1.63279	2.414304
pornwrong	-1.617264	.8159932	-1.98	0.047	-3.216581	-.0179464
pornpct	.0270404	.0128675	2.10	0.036	.0018206	.0522603
_cons	23.70292	1.528013	15.51	0.000	20.70807	26.69777
lns_1						
_cons	3.03255	.0124935	242.73	0.000	3.008063	3.057037
lns_2						
_cons	2.844945	.0132682	214.42	0.000	2.81894	2.870951
lns_e1						
_cons	2.912796	.0130252	223.63	0.000	2.887267	2.938324
lns_e2						
_cons	2.790356	.0134129	208.04	0.000	2.764067	2.816645
lns_e12						
_cons	3.22937	.0098266	328.64	0.000	3.21011	3.248629

```
Group A: N = 2621, Group B: N = 2557
. est sto porn_ISDL
. esttab sex_DQ sex_ISDL porn_DQ porn_ISDL, keep(main:) b(3) se ///
>     star(+ 0.10 * 0.05 ** 0.01 *** 0.001) mti nonum
```

	sex_DQ	sex_ISDL	porn_DQ	porn_ISDL
main				
female	-1.654*	-0.421	-1.101***	0.014
	(0.656)	(0.501)	(0.117)	(0.767)
age	0.007	0.023	-0.004	-0.012
	(0.020)	(0.015)	(0.004)	(0.023)
relation	-0.054	0.108	-0.566***	0.260
	(0.726)	(0.551)	(0.130)	(0.846)
educ	0.283	0.670***	-0.090*	0.215
	(0.204)	(0.161)	(0.037)	(0.246)
pornwrong	-2.165*	-2.472***	0.038	-0.288
	(0.888)	(0.664)	(0.159)	(1.013)
pornpct	0.042**	0.046***	0.029***	0.044**
	(0.014)	(0.011)	(0.002)	(0.016)
_cons	2.917+	-0.853	1.711***	-1.389
	(1.622)	(1.217)	(0.290)	(1.868)
N	1326	5176	1327	5178

```
Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001
```

References

Jann, B. 2007a. fre: Stata module to display one-way frequency table. Statistical Software Components S456835, Boston College Department of Economics. Available from `http://ideas.repec.org/c/boc/bocode/s456835.html`.

———. 2007b. Making regression tables simplified. *The Stata Journal* 7(2): 227–244.

———. 2016. Creating LaTeX documents from within Stata using texdoc. *The Stata Journal* 16(2): 245–263.

Mood, A. M., F. A. Graybill, and D. C. Boes. 1974. *Introduction to the Theory of Statistics*. New York: McGraw-Hill.

Weesie, J. 1999. sg121: Seemingly unrelated estimation and the cluster-adjusted sandwich estimator. *Stata Technical Bulletin* 52: 34–47.

Zellner, A. 1962. An efficient method of estimating seemingly unrelated regressions and tests for aggregation bias. *Journal of the American Statistical Association* 57(298): 348–368.