Sample Log

We read the program effort data from the course website and list the first three observations

```
. use http://data.princeton.edu/wws509/datasets/effort
(Family Planning Effort Data)

. list in 1/3

     +------------------------------------+
     | country   setting   effort   change |
     |------------------------------------|
  1. |  Bolivia       46        0        1 |
  2. |   Brazil       74        0       10 |
  3. |    Chile       89       16       29 |
     +------------------------------------+
```
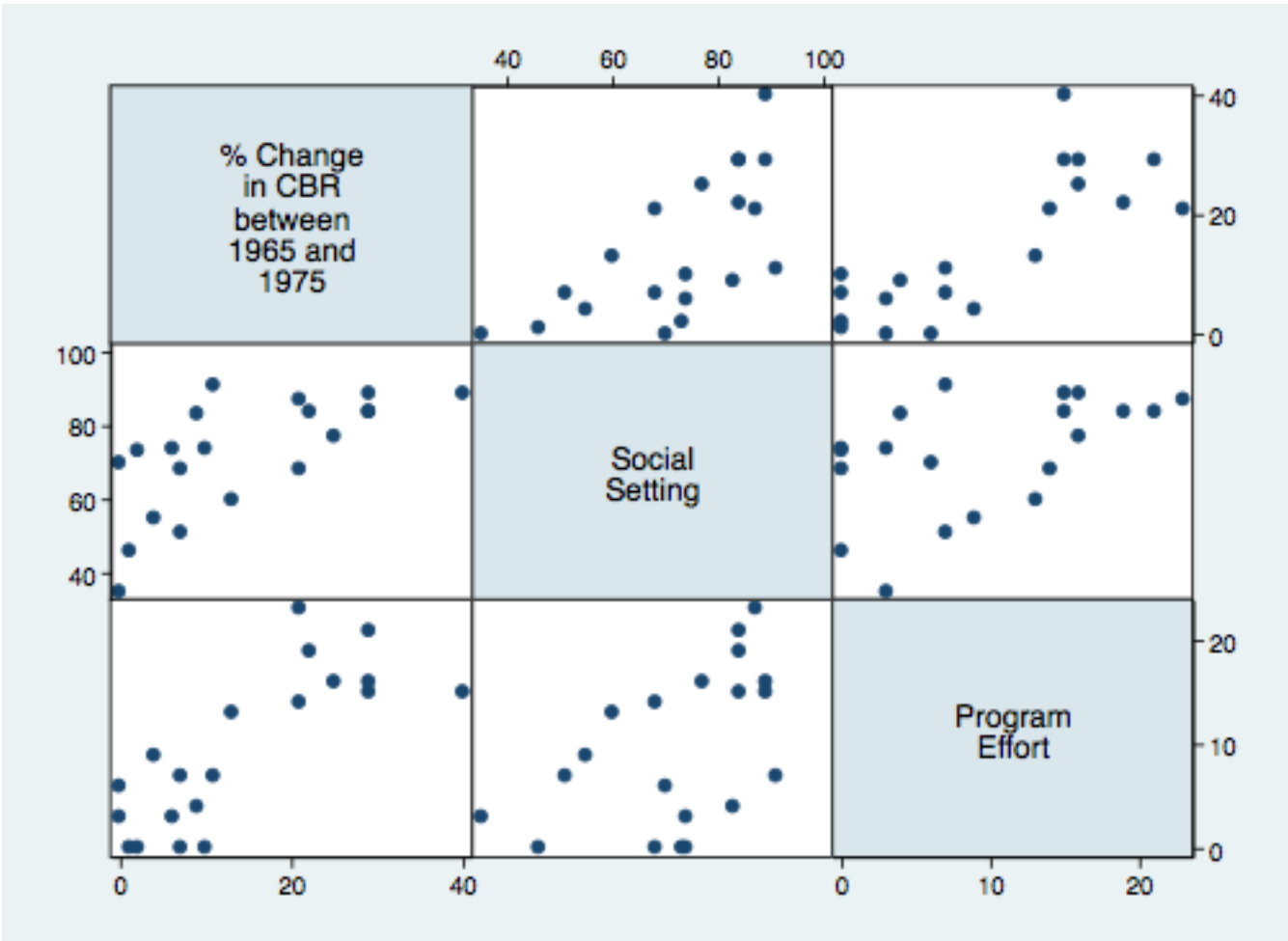
Next we draw a scatterplot matrix

```
. graph matrix change setting effort

. graph export sample.png, width(500) replace
(file sample.png written in PNG format)
```


That's all folks!

More Logs

This is an examples from Rabe-Hesketh and Skrondal (2012) section 3.4.1.

We are fitting a linear random-intercept model with covariates:

```
. use http://www.stata-press.com/data/mlmus3/smoking

. global controls="male mage hsgrad somecoll collgrad married black"

. global controls="$controls kessner2 kessner3 novisit pretri2 pretri3"

.
. quietly xtset momid

. xtreg birwt smoke $controls, mle

Fitting constant-only model:
Iteration 0:   log likelihood = -65493.639
Iteration 1:   log likelihood = -65475.701
Iteration 2:   log likelihood = -65475.486
Iteration 3:   log likelihood = -65475.486

Fitting full model:
Iteration 0:   log likelihood = -65149.757
Iteration 1:   log likelihood = -65145.754
Iteration 2:   log likelihood = -65145.752

Random-effects ML regression                    Number of obs      =      8604
Group variable: momid                           Number of groups   =      3978

Random effects u_i ~ Gaussian                   Obs per group: min =         2
                                                               avg =       2.2
                                                               max =         3

                                                LR chi2(13)        =    659.47
Log likelihood  = -65145.752                    Prob > chi2        =    0.0000

------------------------------------------------------------------------------
       birwt |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       smoke |  -218.3289   18.20988   -11.99   0.000    -254.0196   -182.6382
        male |   120.9375   9.558721    12.65   0.000     102.2027    139.6722
        mage |   8.100548   1.347266     6.01   0.000     5.459956    10.74114
       hsgrad |   56.84715   25.03538     2.27   0.023     7.778705    105.9156
     somecoll |   80.68607   27.30914     2.95   0.003     27.16115     134.211
     collgrad |   90.83273   27.99598     3.24   0.001     35.96162    145.7038
      married |    49.9202   25.50319     1.96   0.050    -.0651368    99.90554
        black |  -211.4138   28.27818    -7.48   0.000     -266.838   -155.9896
     kessner2 |  -92.91883   19.92624    -4.66   0.000    -131.9736   -53.86411
     kessner3 |  -150.8759   40.83414    -3.69   0.000    -230.9093   -70.84246
      novisit |  -30.03035   65.69213    -0.46   0.648    -158.7846    98.72387
      pretri2 |    92.8579   23.19258     4.00   0.000     47.40127    138.3145
      pretri3 |   178.7295   51.64145     3.46   0.001     77.51416    279.9449
        _cons |   3117.191   40.97597    76.07   0.000      3036.88    3197.503
-------------+----------------------------------------------------------------
     /sigma_u |   338.7674   6.296444                      326.6487    351.3358
     /sigma_e |   370.6654   3.867707                      363.1618     378.324
          rho |   .4551282   .0119411                      .4318152    .4785967
------------------------------------------------------------------------------
Likelihood-ratio test of sigma_u=0: chibar2(01)= 1108.77 Prob>=chibar2 = 0.000
```

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