

```

library(metaSEM)

model <- "## Factor loadings
Alpha~A+C+ES
Beta~E+I
## Factor correlation
Alpha~Beta"

RAM <- lavaan2RAM(model, obs.variables=c("A","C","ES","E","I"),
                  A.notation="on", S.notation="with")

rand1 <- tssem1(Digman97$data, Digman97$n, method="REM")

rand2 <- tssem2(rand1, RAM=RAM)
## summary(rand2)

## Estimated correlation matrix
rand2$Cov

##           A           C           ES           E           I
## A  1.00000000  0.3897191  0.4326588  0.04945634  0.09603709
## C  0.38971910  1.0000000  0.4272425  0.11929322  0.19292428
## ES 0.43265883  0.4272425  1.0000000  0.22690165  0.18105569
## E  0.04945634  0.1192932  0.2269017  1.00000000  0.43614972
## I  0.09603709  0.1929243  0.1810557  0.43614972  1.00000000

## Model implied correlation matrix
impliedS <- mxEval(impliedS, rand2$mx.fit)
impliedS

##           [,1]      [,2]      [,3]      [,4]      [,5]
## [1,] 1.0000000  0.3363256  0.4330299  0.1462384  0.1380414
## [2,] 0.3363256  1.0000000  0.4491474  0.1516815  0.1431793
## [3,] 0.4330299  0.4491474  1.0000000  0.1952947  0.1843479
## [4,] 0.1462384  0.1516815  0.1952947  1.0000000  0.4364241
## [5,] 0.1380414  0.1431793  0.1843479  0.4364241  1.0000000

## Residual matrix
rand2$Cov - impliedS

##           A           C           ES           E           I
## A  0.000000000  0.05339354 -0.0003710815 -0.0967820850 -0.0420042664
## C  0.0533935444  0.00000000 -0.0219049076 -0.0323882328  0.0497450020
## ES -0.0003710815 -0.02190491  0.0000000000  0.0316069365 -0.0032922167
## E  -0.0967820850 -0.03238823  0.0316069365  0.0000000000 -0.0002744175
## I  -0.0420042664  0.04974500 -0.0032922167 -0.0002744175  0.0000000000

```