

Code 6 Error in the second stage

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```
library(metaSEM)

##get data prepared for TSSEM##
data<-read.csv("Data.csv", header = TRUE, quote=",",na.strings="NA", fileEncoding="latin1")

data1=matrix(c(data[[2]],data[[3]],data[[4]]),ncol=3,byrow=FALSE)

data2=lapply(split(data1,1:60), function(x){mat=matrix(1,ncol=3,nrow=3);
mat[upper.tri(mat,diag=FALSE)]<-x;
mat[lower.tri(mat)]<-t(mat)[lower.tri(mat)]; mat})

data2=lapply(data2,function(x,var.names){dimnames(x)=list(var.names,var.names);x},
var.names=c("T","E","S"))

data3=list(data=data2,n=data[[5]])

##1st-stage##
random1=tssem1(my.df=data3$data,n=data3$n,method="REM", RE.type="Diag")
summary(random1)

##
## Call:
## meta(y = ES, v = acovR, RE.constraints = Diag(x = paste(RE.startvalues,
##      "*Tau2_", 1:no.es, "_", 1:no.es, sep = "")), RE.lbound = RE.lbound,
##      I2 = I2, model.name = model.name, suppressWarnings = TRUE,
##      silent = silent, run = run)
##
## 95% confidence intervals: z statistic approximation
## Coefficients:
##           Estimate Std. Error   lbound   ubound  z value Pr(>|z|)
## Intercept1  0.3925014  0.0477909  0.2988330  0.4861698   8.2129 2.220e-16
## Intercept2 -0.3686385  0.0230260 -0.4137686 -0.3235084  -16.0097 < 2.2e-16
## Intercept3 -0.3868542  0.0365135 -0.4584193 -0.3152891  -10.5948 < 2.2e-16
## Tau2_1_1    0.0598995  0.0166489  0.0272682  0.0925308   3.5978 0.0003209
## Tau2_2_2    0.0250214  0.0054863  0.0142685  0.0357744   4.5607 5.098e-06
## Tau2_3_3    0.0400192  0.0105848  0.0192733  0.0607650   3.7808 0.0001563
##
## Intercept1 ***
## Intercept2 ***
## Intercept3 ***
## Tau2_1_1    ***
## Tau2_2_2    ***
## Tau2_3_3    ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Q statistic on the homogeneity of effect sizes: 4800.891
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## Degrees of freedom of the Q statistic: 113
## P value of the Q statistic: 0
##
## Heterogeneity indices (based on the estimated Tau2):
##              Estimate
## Intercept1: I2 (Q statistic)  0.9656
## Intercept2: I2 (Q statistic)  0.9013
## Intercept3: I2 (Q statistic)  0.9484
##
## Number of studies (or clusters): 60
## Number of observed statistics: 116
## Number of estimated parameters: 6
## Degrees of freedom: 110
## -2 log likelihood: -45.47753
## OpenMx status1: 0 ("0" or "1": The optimization is considered fine.
## Other values may indicate problems.)

##2nd-stage##
##prepared needed Matrix##
A1=create.mxMatrix(c(0,0,".2*c",0,0,0,0,0),ncol=3,nrow=3)
A2=create.mxMatrix(c(0,".2*a",0,0,0,0,0,0),ncol=3,nrow=3)
A3=create.mxMatrix(c(0,0,".2*c`",0,0,".2*b",0,0,0),ncol=3,nrow=3)
A4=create.mxMatrix(c(0,".2*a",0,0,0,".2*b",0,0,0),ncol=3,nrow=3)
S1=create.mxMatrix(c(1,rep(0,7),".3*e3"),ncol=3,nrow=3)
S2=create.mxMatrix(c(1,rep(0,7),".3*e3"),ncol=3,nrow=3)
S3=create.mxMatrix(c(1,rep(0,3),1,rep(0,3),".3*e3"),ncol=3,nrow=3)
S4=create.mxMatrix(c(1,rep(0,3),".3*e2",rep(0,3),".3*e3"),ncol=3,nrow=3)

##conduct the 4-step analysis##
random2.1=tssem2(random1,Amatrix=A1,Smatrix=S1,diag.constraints=TRUE,intervals="LB")
random2.2=tssem2(random1,Amatrix=A2,Smatrix=S2,diag.constraints=TRUE,intervals="LB")
random2.3=tssem2(random1,Amatrix=A3,Smatrix=S3,diag.constraints=TRUE,intervals="LB")
random2.4=tssem2(random1,Amatrix=A4,Smatrix=S4,diag.constraints=TRUE,intervals="LB")

A5=create.mxMatrix(c(0,".2*a",".2*c`",0,0,".2*b",0,0,0),ncol=3,nrow=3)
S5=create.mxMatrix(c(1,rep(0,3),".3*e2",rep(0,3),".3*e3"),ncol=3,nrow=3)
random2.5=tssem2(random1,Amatrix=A5,Smatrix=S5,diag.constraints=TRUE,intervals="LB")
summary(random2.5)

##
## Call:
## wls(Cov = pooledS, asyCov = asyCov, n = tssem1.obj$total.n, Amatrix = Amatrix,
##      Smatrix = Smatrix, Fmatrix = Fmatrix, diag.constraints = diag.constraints,
##      cor.analysis = cor.analysis, intervals.type = intervals.type,
##      mx.algebras = mx.algebras, model.name = model.name, suppressWarnings = suppressWarnings,
##      silent = silent, run = run)
##
## 95% confidence intervals: Likelihood-based statistic
## Coefficients:
##      Estimate Std. Error  lbound  ubound z value Pr(>|z|)
## a    0.39250      NA  0.29883  0.48617     NA     NA
## c` -0.25628      NA -0.31962 -0.18752     NA     NA
## b   -0.28626      NA -0.37339 -0.19620     NA     NA
## e2   0.84594      NA  0.76364  0.91070     NA     NA
## e3   0.79478      NA  0.74113  0.83964     NA     NA

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##
## Goodness-of-fit indices:
##
##                               Value
## Sample size                   15058.00
## Chi-square of target model     0.00
## DF of target model             0.00
## p value of target model        0.00
## Number of constraints imposed on "Smatrix" 2.00
## DF manually adjusted           0.00
## Chi-square of independence model 423.67
## DF of independence model       3.00
## RMSEA                         0.00
## RMSEA lower 95% CI            0.00
## RMSEA upper 95% CI            0.00
## SRMR                           0.00
## TLI                           -Inf
## CFI                           1.00
## AIC                           0.00
## BIC                           0.00
## OpenMx status1: 0 ("0" or "1": The optimization is considered fine.
## Other values indicate problems.)

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sessionInfo()
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## R version 3.3.2 (2016-10-31)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Linux Mint 18.1
##
## locale:
## [1] LC_CTYPE=en_SG.UTF-8      LC_NUMERIC=C
## [3] LC_TIME=en_SG.UTF-8      LC_COLLATE=en_SG.UTF-8
## [5] LC_MONETARY=en_SG.UTF-8  LC_MESSAGES=en_SG.UTF-8
## [7] LC_PAPER=en_SG.UTF-8     LC_NAME=C
## [9] LC_ADDRESS=C             LC_TELEPHONE=C
## [11] LC_MEASUREMENT=en_SG.UTF-8 LC_IDENTIFICATION=C
##
## attached base packages:
## [1] parallel stats graphics grDevices utils datasets methods
## [8] base
##
## other attached packages:
## [1] metaSEM_0.9.12 OpenMx_2.7.4 Rcpp_0.12.9 Matrix_1.2-8
## [5] MASS_7.3-45 digest_0.6.11
##
## loaded via a namespace (and not attached):
## [1] lattice_0.20-34 rprojroot_1.2 grid_3.3.2 backports_1.0.5
## [5] magrittr_1.5 ellipse_0.3-8 evaluate_0.10 stringi_1.1.2
## [9] rmarkdown_1.3 tools_3.3.2 stringr_1.1.0 yaml_2.1.14
## [13] htmltools_0.3.5 knitr_1.15.1

```