

R Notebook

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```
load("rep.RData")
library(tidyverse)
library(metaSEM)
library(semPlot)

# view(mod.all.data)

cfal <- tssem1(mod.all.data$data,
              mod.all.data$n,
              method="REM",
              RE.type = "Diag",
              suppressWarnings = FALSE,
              silent = FALSE)

summary(cfal)

# Extract the fixed coefficients (correlations)
fixed.coefs <- coef(cfal, "fixed")

# Make a symmetric matrix
fc.mat <- vec2symMat(fixed.coefs, diag = FALSE)

# Label rows and columns
dims <- c("Brand Equity", "Performance", "Value Equity", "Relationship Equity")
dimnames(fc.mat)[[1]] <- dimnames(fc.mat)[[2]] <- dims

fc.mat

A <- matrix(
  c(
    0, 0, 0, 0,
    "0.3*BE_To_BP", 0, "0.3*VE_To_BP", "0.3*RE_To_BP",
    0, 0, 0, 0,
    0, 0, 0, 0
  ),
  nrow = 4,
  ncol = 4,
  byrow = TRUE
)

# Label columns and rows
```

```

dimnames(A)[[1]] <- dimnames(A)[[2]] <- dims

A

A <- as.mxMatrix(A)

# Make a diagonal matrix for the variances
Vars <- Diag(c(1, "0.2*Var_BP", 1, 1))

S <- bdiagMat(list(Vars))

# Label columns and rows
dimnames(S)[[1]] <- dimnames(S)[[2]] <- dims

S

S <- as.mxMatrix(S)

# Construct diagonal matrix
F <- Diag(c(1, 1, 1, 1))

dimnames(F)[[1]] <- dimnames(F)[[2]] <- dims

F

F <- as.mxMatrix(F)

cfa2 <- tssem2(cfa1,
               Amatrix = A,
               Smatrix = S,
               Fmatrix = F,
               diag.constraints = FALSE)

summary(cfa2)

cfa.plot <- meta2semPlot(cfa2)

# Create Plot labels (left to right, bottom to top)
labels <-
  c("Brand\nEquity",
    "Brand\nPerformance",
    "Value\nEquity",
    "Relationship\nEquity")

```

Error when I try to run this code

```
# Plot
semPaths(cfa.plot,
         whatLabels = "est",
         edge.color = "black",
         nodeLabels = labels
        )
```