R Syntax

library("lavaan")

library(semTools)

library(lavaanPlot)

#FULL Model Comparison

model1 <- 'H =~ H1 + H2 + H3 + H4 + H5 + H6 + H7 + H8 + H9 + H10'

result <- sem(model2, data = Full)

summary(result)

fit <- lavaan(model1, data=Full,

auto.var=TRUE, auto.fix.first=TRUE,

auto.cov.lv.x=TRUE, estimator = "DWLS")

summary(fit, fit.measures=TRUE, standardized = TRUE, rsquare = TRUE)

resid(fit, type="standardized")

resid(fit, type="cor")

lavaanPlot(model = fit, node\_options = list(shape = "box", fontname = "Helvetica"), edge\_options = list(color = "grey"), coefs = F)

model2 <- 'SC =~ H1 + H4 + H5 + H6 + H8 + H9 + H10

RS =~ H2 + H3 + H7 + H9'

result <- sem(model2, data = Full)

summary(result)

fit <- lavaan(model2, data=Full,

auto.var=TRUE, auto.fix.first=TRUE,

auto.cov.lv.x=TRUE, estimator = "DWLS")

summary(fit, fit.measures=TRUE, standardized = TRUE, rsquare = TRUE)

resid(fit, type="standardized")

resid(fit, type="cor")

lavaanPlot(model = fit, node\_options = list(shape = "box", fontname = "Helvetica"), edge\_options = list(color = "grey"), coefs = F)

#MEN

model3 <- 'SC =~ H1 + H4 + H5 + H6 + H8 + H9 + H10 + H2 + H3 + H7'

result <- sem(model3, data = MaleHSNS)

summary(result)

fit <- lavaan(model3, data=MaleHSNS,

auto.var=TRUE, auto.fix.first=TRUE,

auto.cov.lv.x=TRUE, estimator = "DWLS")

summary(fit, fit.measures=TRUE, standardized = TRUE, rsquare = TRUE)

resid(fit, type="standardized")

resid(fit, type="cor")

model4 <- 'SC =~ H1 + H4 + H5 + H6 + H8 + H9 + H10

RS =~ H2 + H3 + H7 + H9'

result <- sem(model4, data = MaleHSNS)

summary(result)

fit <- lavaan(model4, data=MaleHSNS,

auto.var=TRUE, auto.fix.first=TRUE,

auto.cov.lv.x=TRUE, estimator = "DWLS")

summary(fit, fit.measures=TRUE, standardized = TRUE, rsquare = TRUE)

resid(fit, type="standardized")

resid(fit, type="cor")

lavaanPlot(model = fit, node\_options = list(shape = "box", fontname = "Helvetica"), edge\_options = list(color = "grey"), coefs = F)

#FEMELE

Model5 <- 'SC =~ H1 + H4 + H5 + H6 + H8 + H9 + H10 + H2 + H3 + H7'

result <- sem(model5, data = FemaleHSNS)

summary(result)

fit <- lavaan(model5, data=FemaleHSNS,

auto.var=TRUE, auto.fix.first=TRUE,

auto.cov.lv.x=TRUE, estimator = "DWLS")

summary(fit, fit.measures=TRUE, standardized = TRUE, rsquare = TRUE)

resid(fit, type="standardized")

resid(fit, type="cor")

lavaanPlot(model = fit, node\_options = list(shape = "box", fontname = "Helvetica"), edge\_options = list(color = "grey"), coefs = F)

model6 <- 'SC =~ H1 + H4 + H5 + H6 + H8 + H9 + H10

RS =~ H2 + H3 + H7 + H9'

result <- sem(model6, data = FemaleHSNS)

summary(result)

fit <- lavaan(model6, data=FemaleHSNS,

auto.var=TRUE, auto.fix.first=TRUE,

auto.cov.lv.x=TRUE, estimator = "DWLS")

summary(fit, fit.measures=TRUE, standardized = TRUE, rsquare = TRUE)

resid(fit, type="standardized")

resid(fit, type="cor")

lavaanPlot(model = fit, node\_options = list(shape = "box", fontname = "Helvetica"), edge\_options = list(color = "grey"), coefs = F)

#Measurment Invariance

measurementInvariance(model = model2, strict = TRUE, data = Full, group = "gender")