#Packages necessary for analyses and reproducing figures

library(lavaan)

library(lme4)

library(lattice)

library(ggplot2)

library(patchwork)

library(tidyverse)

library(RColorBrewer)

library(dplyr)

#set the destination of databases

setwd("[your destination] ")

#database for cross-lagged and mediation models

data <- read.csv("data-models-shortform.csv",header = TRUE,sep = ",", dec=".")

#database for Figures – long format

data <- read.csv("long.csv",header = TRUE,sep = ",", dec=".")

# cross-lagged regression.

cross <-

'Anx2 ~ Anx1 + Cor1

Cor2 ~ Anx1 + Cor1

Anx1 ~~ Cor1

Anx2 ~~ Cor2'

#estimating fit using available data only

fit <- sem(cross, data=data, estimator = "MLR")

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

#estimating fit using FIML

fit <- sem(cross, data=data, missing = "ML")

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

# mediation model all countries

Mediat1 <- 'Anx2 ~ Anx1 + a\*Cor1

All ~ Anx1 + c\*Cor1 + b\*Anx2

indirect := a\*b

total := c + (a\*b)'

# mediation model – Italy only

mediat2 <- 'Anx2 ~ Anx1 + a\*Cor1

Ital ~ Anx1 + c\*Cor1 + b\*Anx2

indirect := a\*b

total := c + (a\*b)'

# fit using MLR or FIML

fit <- sem(mediat2, data=data, missing = "ML")

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

fit <- sem(mediat2, data=data, estimator = "MLR")

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

### Figure – scatterplot per coutries

p1 <- ggplot(data, aes(x = Anx2, y = Like)) +

theme\_linedraw() +

geom\_jitter(width = 0.6, height = 0.6, color = "steelblue") +

geom\_smooth(method='lm', formula= y~x, color = "darkred") +

scale\_y\_continuous(name = "Attitude toward other nations",

breaks = seq(0, 100, 10),

limits=c(0, 100)) +

scale\_x\_continuous(name = "Anxiety T2",

breaks = seq(1, 5, 1),

limits=c(1, 5)) +

facet\_wrap(~Nation2, ncol = 4)