Supplementary material 2. Script of R used in our study.

```
library(lavaan)
library(semPlot)
library(semTools)
library(psych)
library(haven)
Database <- read_dta("E:/Database_v1.dta")
```

#PHQ-9
```
model.PHQ9 <- "
F1 =~ PHQ_1 + PHQ_2 + PHQ_3 + PHQ_4 + PHQ_5 + PHQ_6 + PHQ_7 + PHQ_8 + PHQ_9"

fit.model.PHQ9 <- cfa(model.PHQ9, data=Database,estimator="WLSMV", missing = "listwise",
ordered = c("PHQ_1", "PHQ_2", "PHQ_3", "PHQ_4", "PHQ_5", "PHQ_6", "PHQ_7", "PHQ_8",
"PHQ_9"))

summary(fit.model.PHQ9, fit.measures=TRUE, standardized=TRUE)

reliability(fit.model.PHQ9)
```

#PHQ-8
```
model.PHQ8 <- "
F1 =~ PHQ_1 + PHQ_2 + PHQ_3 + PHQ_4 + PHQ_5 + PHQ_6 + PHQ_7 + PHQ_8"

fit.model.PHQ8 <- cfa(model.PHQ8, data=Database, estimator="WLSMV", missing =
"listwise", ordered = c("PHQ_1", "PHQ_2", "PHQ_3", "PHQ_4", "PHQ_5", "PHQ_6", "PHQ_7",
"PHQ_8", "PHQ_9"))

summary(fit.model.PHQ8, fit.measures=TRUE, standardized=TRUE)

reliability(fit.model.PHQ8)
```

#PHQ-2
```
model.PHQ2 <- "
F1 =~ PHQ_1 + PHQ_2"

fit.model.PHQ2 <- cfa(model.PHQ2, data=Database, estimator="WLSMV", missing =
"listwise", ordered = c("PHQ_1", "PHQ_2", "PHQ_3", "PHQ_4", "PHQ_5", "PHQ_6", "PHQ_7",
"PHQ_8", "PHQ_9"))

summary(fit.model.PHQ2, fit.measures=TRUE, standardized=TRUE)

reliability(fit.model.PHQ2)
```

#GAD-7
```
model.GAD7 <- "
F1 =~ GAD1 + GAD2 + GAD3 + GAD4 + GAD5 + GAD6 + GAD7"

fit.model.GAD7 <- cfa(model.GAD7, data=Database, estimator="WLSMV", missing =
"listwise", ordered = c("GAD1", "GAD2", "GAD3", "GAD4", "GAD5", "GAD6", "GAD7"))

summary(fit.model.GAD7, fit.measures=TRUE, standardized=TRUE)

reliability(fit.model.GAD7)
```

#GAD-2
```
model.GAD2 <- "
F1 =~ GAD1 + GAD2"

fit.model.GAD2 <- cfa(model.GAD2, data=Database, estimator="WLSMV", missing =
"listwise", ordered = c("GAD1", "GAD2", "GAD3", "GAD4", "GAD5", "GAD6", "GAD7"))

summary(fit.model.GAD2, fit.measures=TRUE, standardized=TRUE)

reliability(fit.model.GAD2)
```