Positive Parenting

Negative Parenting

Supplement: Primary Models

Positive Parenting

```
library(lavaan)

PosFig<-'
#regressions
EAAfollowup ~ b1*cr
EAAfollowup ~ b2*mc_postdo
EAAfollowup ~ b3*postdoxcr
EAAfollowup ~ ncgender
EAAfollowup ~ bldo
cr~bldo
cr~postdoxcr

#constraints for simple slopes
Low:=b1+b3*-0.1459278
Avg:= b1
High:=b1+b3*0.1459278
'
PosFig.fit<-sem(PosFig, data = data, fixed.x=FALSE, missing = "fiml", estimator = "MLR")

summary(PosFig.fit,  standardized = TRUE, fit.measures=TRUE, ci=TRUE)
```

```
## lavaan 0.6.15 ended normally after 107 iterations
##
##   Estimator                                         ML
##   Optimization method                           NLMINB
##   Number of model parameters                        25
##
##   Number of observations                            62
##   Number of missing patterns                         3
##
## Model Test User Model:
##                                               Standard      Scaled
##   Test Statistic                                 0.359       0.421
##   Degrees of freedom                                 2           2
##   P-value (Chi-square)                           0.836       0.810
##   Scaling correction factor                                  0.852
##     Yuan-Bentler correction (Mplus variant)
##
## Model Test Baseline Model:
##
##   Test statistic                                12.365      11.807
##   Degrees of freedom                                 9           9
##   P-value                                        0.193       0.224
##   Scaling correction factor                                  1.047
##
## User Model versus Baseline Model:
##
##   Comparative Fit Index (CFI)                    1.000       1.000
##   Tucker-Lewis Index (TLI)                       3.194       3.531
##
##   Robust Comparative Fit Index (CFI)                         1.000
##   Robust Tucker-Lewis Index (TLI)                            4.270
##
## Loglikelihood and Information Criteria:
##
##   Loglikelihood user model (H0)                -61.138     -61.138
##   Scaling correction factor                                  1.248
##       for the MLR correction
##   Loglikelihood unrestricted model (H1)        -60.958     -60.958
##   Scaling correction factor                                  1.219
##       for the MLR correction
##
##   Akaike (AIC)                                 172.275     172.275
##   Bayesian (BIC)                               225.453     225.453
##   Sample-size adjusted Bayesian (SABIC)        146.796     146.796
##
## Root Mean Square Error of Approximation:
##
##   RMSEA                                          0.000       0.000
##   90 Percent confidence interval - lower         0.000       0.000
##   90 Percent confidence interval - upper         0.145       0.177
##   P-value H_0: RMSEA <= 0.050                    0.857       0.800
##   P-value H_0: RMSEA >= 0.080                    0.114       0.166
```

```
##
##   Robust RMSEA                                               0.000
##   90 Percent confidence interval - lower                     0.000
##   90 Percent confidence interval - upper                     0.145
##   P-value H_0: Robust RMSEA <= 0.050                         0.837
##   P-value H_0: Robust RMSEA >= 0.080                         0.127
##
## Standardized Root Mean Square Residual:
##
##   SRMR                                             0.013       0.013
##
## Parameter Estimates:
##
##   Standard errors                             Sandwich
##   Information bread                           Observed
##   Observed information based on                Hessian
##
## Regressions:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##   EAAfollowup ~
##     cr        (b1)   -0.049    0.042   -1.152    0.249   -0.132    0.034
##     mc_postdo (b2)    0.269    0.415    0.648    0.517   -0.544    1.082
##     postdoxcr (b3)   -0.676    0.212   -3.193    0.001   -1.092   -0.261
##     ncgender          0.325    0.139    2.339    0.019    0.053    0.597
##     bldo              0.516    0.638    0.809    0.418   -0.734    1.766
##   cr ~
##     bldo             -1.848    1.247   -1.482    0.138   -4.292    0.596
##     postdoxcr         0.193    1.571    0.123    0.902   -2.887    3.273
##    Std.lv  Std.all
##
##    -0.049   -0.117
##     0.269    0.078
##    -0.676   -0.219
##     0.325    0.294
##     0.516    0.098
##
##    -1.848   -0.148
##     0.193    0.026
##
## Covariances:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##   mc_postdo ~~
##     postdoxcr         0.004    0.006    0.744    0.457   -0.007    0.016
##     ncgender         -0.011    0.007   -1.634    0.102   -0.024    0.002
##     bldo              0.004    0.002    2.004    0.045    0.000    0.008
##   postdoxcr ~~
##     ncgender         -0.000    0.008   -0.059    0.953   -0.017    0.016
##     bldo             -0.000    0.002   -0.183    0.855   -0.004    0.004
##   ncgender ~~
##     bldo              0.000    0.005    0.015    0.988   -0.010    0.010
##    Std.lv  Std.all
##
```

```
##     0.004    0.184
##    -0.011   -0.163
##     0.004    0.303
##
##    -0.000   -0.007
##    -0.000   -0.024
##
##     0.000    0.002
##
## Intercepts:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##    .EAAfollowup      -0.036    0.173   -0.206    0.837   -0.374    0.303
##    .cr                2.633    0.231   11.416    0.000    2.181    3.085
##     mc_postdo         0.003    0.019    0.139    0.889   -0.035    0.040
##     postdoxcr         0.005    0.022    0.215    0.830   -0.038    0.047
##     ncgender          0.290    0.058    5.036    0.000    0.177    0.403
##     bldo              0.134    0.012   11.024    0.000    0.110    0.158
##    Std.lv  Std.all
##    -0.036   -0.071
##     2.633    2.201
##     0.003    0.018
##     0.005    0.029
##     0.290    0.640
##     0.134    1.398
##
## Variances:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##    .EAAfollowup       0.211    0.045    4.731    0.000    0.123    0.298
##    .cr                1.398    0.218    6.418    0.000    0.971    1.825
##     mc_postdo         0.021    0.007    3.199    0.001    0.008    0.034
##     postdoxcr         0.026    0.010    2.532    0.011    0.006    0.047
##     ncgender          0.206    0.024    8.523    0.000    0.159    0.253
##     bldo              0.009    0.002    4.425    0.000    0.005    0.013
##    Std.lv  Std.all
##     0.211    0.838
##     1.398    0.977
##     0.021    1.000
##     0.026    1.000
##     0.206    1.000
##     0.009    1.000
##
## Defined Parameters:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##     Low               0.050    0.059    0.851    0.395   -0.065    0.165
##     Avg              -0.049    0.042   -1.152    0.249   -0.132    0.034
##     High             -0.148    0.046   -3.231    0.001   -0.237   -0.058
##    Std.lv  Std.all
##     0.050   -0.085
##    -0.049   -0.117
##    -0.148   -0.149
```

Negative Parenting

```
library(lavaan)

NegFig<-'
#regressions
EAAfollowup ~ b1*cr
EAAfollowup ~ b2*mc_postdont
EAAfollowup ~ b3*postdontxcr
EAAfollowup ~ ncgender
EAAfollowup ~ bldont
cr~bldont
cr~postdontxcr

#constraints for simple slopes
Low:=b1+b3*-0.1850237
Avg:= b1
High:=b1+b3*0.1850237
'
NegFig.fit<-sem(NegFig, data = data, fixed.x=FALSE, missing = "fiml", estimator = "MLR")

summary(NegFig.fit,  standardized = TRUE, fit.measures=TRUE, ci = TRUE)
```

```
## lavaan 0.6.15 ended normally after 90 iterations
##
##   Estimator                                         ML
##   Optimization method                           NLMINB
##   Number of model parameters                        25
##
##   Number of observations                            62
##   Number of missing patterns                         3
##
## Model Test User Model:
##                                              Standard      Scaled
##   Test Statistic                                0.622       0.604
##   Degrees of freedom                                2           2
##   P-value (Chi-square)                          0.733       0.739
##   Scaling correction factor                                 1.029
##     Yuan-Bentler correction (Mplus variant)
##
## Model Test Baseline Model:
##
##   Test statistic                               16.188      14.436
##   Degrees of freedom                                9           9
##   P-value                                       0.063       0.108
##   Scaling correction factor                                 1.121
##
## User Model versus Baseline Model:
##
##   Comparative Fit Index (CFI)                   1.000       1.000
##   Tucker-Lewis Index (TLI)                      1.863       2.155
##
##   Robust Comparative Fit Index (CFI)                        1.000
##   Robust Tucker-Lewis Index (TLI)                           2.439
##
## Loglikelihood and Information Criteria:
##
##   Loglikelihood user model (H0)              -125.748    -125.748
##   Scaling correction factor                                 1.039
##       for the MLR correction
##   Loglikelihood unrestricted model (H1)      -125.437    -125.437
##   Scaling correction factor                                 1.038
##       for the MLR correction
##
##   Akaike (AIC)                                301.496     301.496
##   Bayesian (BIC)                              354.674     354.674
##   Sample-size adjusted Bayesian (SABIC)       276.017     276.017
##
## Root Mean Square Error of Approximation:
##
##   RMSEA                                         0.000       0.000
##   90 Percent confidence interval - lower        0.000       0.000
##   90 Percent confidence interval - upper        0.177       0.172
##   P-value H_0: RMSEA <= 0.050                   0.766       0.778
##   P-value H_0: RMSEA >= 0.080                   0.190       0.179
```

```
##
##   Robust RMSEA                                               0.000
##   90 Percent confidence interval - lower                     0.000
##   90 Percent confidence interval - upper                     0.179
##   P-value H_0: Robust RMSEA <= 0.050                         0.771
##   P-value H_0: Robust RMSEA >= 0.080                         0.187
##
## Standardized Root Mean Square Residual:
##
##   SRMR                                             0.019       0.019
##
## Parameter Estimates:
##
##   Standard errors                             Sandwich
##   Information bread                           Observed
##   Observed information based on                Hessian
##
## Regressions:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##   EAAfollowup ~
##     cr        (b1)   -0.033    0.039   -0.848    0.397   -0.109    0.043
##     mc_pstdnt (b2)   -0.147    0.268   -0.546    0.585   -0.672    0.379
##     pstdntxcr (b3)    0.472    0.186    2.542    0.011    0.108    0.835
##     ncgender           0.270    0.146    1.856    0.063   -0.015    0.556
##     bldont            -0.076    0.428   -0.178    0.859   -0.915    0.763
##   cr ~
##     bldont             1.652    1.010    1.636    0.102   -0.327    3.631
##     pstdntxcr         -1.478    1.015   -1.455    0.146   -3.468    0.512
##    Std.lv  Std.all
##
##    -0.033   -0.079
##    -0.147   -0.054
##     0.472    0.217
##     0.270    0.245
##    -0.076   -0.024
##
##     1.652    0.216
##    -1.478   -0.286
##
## Covariances:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##   mc_postdont ~~
##     postdontxcr        0.004    0.008    0.563    0.573   -0.011    0.019
##     ncgender          -0.002    0.010   -0.172    0.864   -0.021    0.018
##     bldont             0.006    0.004    1.527    0.127   -0.002    0.013
##   postdontxcr ~~
##     ncgender           0.017    0.013    1.326    0.185   -0.008    0.042
##     bldont             0.007    0.004    1.589    0.112   -0.002    0.015
##   ncgender ~~
##     bldont            -0.004    0.008   -0.480    0.631   -0.020    0.012
##    Std.lv  Std.all
##
```

```
##     0.004    0.102
##    -0.002   -0.021
##     0.006    0.202
##
##     0.017    0.160
##     0.007    0.189
##
##    -0.004   -0.056
##
## Intercepts:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##    .EAAfollowup       0.051    0.241    0.210    0.833   -0.421    0.522
##    .cr                1.534    0.591    2.595    0.009    0.375    2.692
##     mc_postdont      -0.001    0.024   -0.023    0.981   -0.047    0.046
##     postdontxcr      -0.006    0.030   -0.211    0.833   -0.066    0.053
##     ncgender          0.290    0.058    5.036    0.000    0.177    0.403
##     bldont            0.511    0.020   25.457    0.000    0.471    0.550
##    Std.lv  Std.all
##     0.051    0.101
##     1.534    1.282
##    -0.001   -0.003
##    -0.006   -0.028
##     0.290    0.640
##     0.511    3.267
##
## Variances:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##    .EAAfollowup       0.216    0.045    4.819    0.000    0.128    0.303
##    .cr                1.281    0.241    5.314    0.000    0.808    1.753
##     mc_postdont       0.034    0.005    6.627    0.000    0.024    0.044
##     postdontxcr       0.053    0.015    3.475    0.001    0.023    0.084
##     ncgender          0.206    0.024    8.523    0.000    0.159    0.253
##     bldont            0.024    0.004    6.010    0.000    0.016    0.032
##    Std.lv  Std.all
##     0.216    0.858
##     1.281    0.895
##     0.034    1.000
##     0.053    1.000
##     0.206    1.000
##     0.024    1.000
##
## Defined Parameters:
##                    Estimate  Std.Err  z-value  P(>|z|) ci.lower ci.upper
##     Low              -0.120    0.043   -2.803    0.005   -0.204   -0.036
##     Avg              -0.033    0.039   -0.848    0.397   -0.109    0.043
##     High              0.054    0.060    0.912    0.362   -0.062    0.171
##    Std.lv  Std.all
##    -0.120   -0.119
##    -0.033   -0.079
##     0.054   -0.038
```