Joachim_CFA_report

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First the analysis of GPTS

```
## This is lavaan 0.6-8
## lavaan is FREE software! Please report any bugs.

##

## ###############################################################################

## This is semTools 0.5-4

## All users of R (or SEM) are invited to submit functions or ideas for functions.

## ###############################################################################
```

recoding variables in dataset 2 and 3

```
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##     filter, lag

## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

First model, based on previous studies (pdf):

```
## chisq.scaled    df.scaled   cfi.scaled   tli.scaled rmsea.scaled         srmr
##      425.135      134.000        0.989        0.987        0.050        0.033

## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##        reference persecutory
## alpha  0.9451981   0.9715748
## omega  0.9160101   0.9466453
## omega2 0.9160101   0.9466453
## omega3 0.9231342   0.9575649
## avevar 0.6910939   0.7828572
```

```
##              lhs op          rhs     mi    epc sepc.lv sepc.all sepc.nox
## 159    reference =~ partB_gpts10 19.104 -0.303  -0.303   -0.303   -0.303
## 310 partB_gptsb5 ~~ partB_gpts10 15.416  0.082   0.082    0.386    0.386
## 312 partB_gptsb6 ~~ partB_gptsb8 11.965  0.060   0.060    0.369    0.369
## 154    reference =~ partB_gptsb5 11.773 -0.229  -0.229   -0.229   -0.229
## 170 PartA_gptsa1 ~~ PartA_gptsa4 10.947  0.076   0.076    0.303    0.303
## 151    reference =~ partB_gptsb2 10.527  0.224   0.224    0.224    0.224
## 218 PartA_gptsa4 ~~ PartA_gptsa7  9.837 -0.096  -0.096   -0.359   -0.359
## 319 partB_gptsb8 ~~ partB_gpts10  9.546  0.064   0.064    0.314    0.314
## 303 partB_gptsb4 ~~ partB_gptsb8  8.973 -0.093  -0.093   -0.507   -0.507
## 292 partB_gptsb2 ~~ partB_gpts10  8.514 -0.104  -0.104   -0.474   -0.474
```

Second model. Item 8a was removed based on fit indices from previous step of the analysis

```
## chisq.scaled    df.scaled   cfi.scaled   tli.scaled rmsea.scaled         srmr
##      389.246      118.000        0.989        0.987        0.052        0.033
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##        reference persecutory
## alpha  0.9337281   0.9715748
## omega  0.8979067   0.9466392
## omega2 0.8979067   0.9466392
## omega3 0.9049826   0.9574355
## avevar 0.6758938   0.7826914
```

```
##              lhs op          rhs     mi    epc sepc.lv sepc.all sepc.nox
## 151    reference =~ partB_gpts10 16.552 -0.302  -0.302   -0.302   -0.302
## 158  persecutory =~ PartA_gptsa7 13.958  0.271   0.271    0.271    0.271
## 284 partB_gptsb5 ~~ partB_gpts10 13.726  0.078   0.078    0.373    0.373
## 286 partB_gptsb6 ~~ partB_gptsb8 12.704  0.063   0.063    0.383    0.383
## 161 PartA_gptsa1 ~~ PartA_gptsa4 10.058  0.075   0.075    0.302    0.302
## 146    reference =~ partB_gptsb5  9.594 -0.221  -0.221   -0.221   -0.221
## 143    reference =~ partB_gptsb2  9.517  0.225   0.225    0.225    0.225
## 277 partB_gptsb4 ~~ partB_gptsb8  8.992 -0.093  -0.093   -0.509   -0.509
## 293 partB_gptsb8 ~~ partB_gpts10  8.750  0.062   0.062    0.306    0.306
## 266 partB_gptsb2 ~~ partB_gpts10  8.670 -0.106  -0.106   -0.479   -0.479
```

Difference in robust chi-square test (see Szczypiński et al., 2021 section 2.3.2) between models 1 i 2

```
## [1] "chisq.diff: " "38.732"       "p value: "    "0.001"
```

Summary of model 2 GPTS

```
## lavaan 0.6-8 ended normally after 23 iterations
##
##   Estimator                                         DWLS
##   Optimization method                             NLMINB
##   Number of model parameters                          86
##
##                                                     Used       Total
##   Number of observations                             865        1827
##
## Model Test User Model:
##                                                 Standard      Robust
##   Test Statistic                                 200.770     389.246
##   Degrees of freedom                                 118         118
##   P-value (Chi-square)                             0.000       0.000
##   Scaling correction factor                                    0.569
##   Shift parameter                                             36.569
##        simple second-order correction
##
## Parameter Estimates:
##
##   Standard errors                             Robust.sem
##   Information                                   Expected
##   Information saturated (h1) model        Unstructured
##
## Latent Variables:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   reference =~
##     PartA_gptsa1      0.822    0.018   44.913    0.000    0.822    0.822
##     PartA_gptsa2      0.815    0.021   38.637    0.000    0.815    0.815
##     PartA_gptsa3      0.740    0.021   34.996    0.000    0.740    0.740
##     PartA_gptsa4      0.901    0.012   72.640    0.000    0.901    0.901
##     PartA_gptsa5      0.825    0.017   47.197    0.000    0.825    0.825
##     PartA_gptsa6      0.859    0.015   57.079    0.000    0.859    0.859
##     PartA_gptsa7      0.783    0.020   39.242    0.000    0.783    0.783
##   persecutory =~
##     partB_gptsb1      0.830    0.018   45.789    0.000    0.830    0.830
##     partB_gptsb2      0.899    0.016   56.431    0.000    0.899    0.899
##     partB_gptsb3      0.850    0.015   55.634    0.000    0.850    0.850
##     partB_gptsb4      0.890    0.016   55.277    0.000    0.890    0.890
##     partB_gptsb5      0.910    0.012   75.933    0.000    0.910    0.910
##     partB_gptsb6      0.913    0.011   86.556    0.000    0.913    0.913
##     partB_gptsb7      0.883    0.018   48.185    0.000    0.883    0.883
##     partB_gptsb8      0.916    0.011   86.265    0.000    0.916    0.916
##     partB_gptsb9      0.888    0.015   60.438    0.000    0.888    0.888
##     partB_gpts10      0.864    0.015   57.097    0.000    0.864    0.864
##
## Covariances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   reference ~~
##     persecutory       0.865    0.015   57.259    0.000    0.865    0.865
##
## Intercepts:
```

```
##                     Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .PartA_gptsa1       0.000                               0.000    0.000
##    .PartA_gptsa2       0.000                               0.000    0.000
##    .PartA_gptsa3       0.000                               0.000    0.000
##    .PartA_gptsa4       0.000                               0.000    0.000
##    .PartA_gptsa5       0.000                               0.000    0.000
##    .PartA_gptsa6       0.000                               0.000    0.000
##    .PartA_gptsa7       0.000                               0.000    0.000
##    .partB_gptsb1       0.000                               0.000    0.000
##    .partB_gptsb2       0.000                               0.000    0.000
##    .partB_gptsb3       0.000                               0.000    0.000
##    .partB_gptsb4       0.000                               0.000    0.000
##    .partB_gptsb5       0.000                               0.000    0.000
##    .partB_gptsb6       0.000                               0.000    0.000
##    .partB_gptsb7       0.000                               0.000    0.000
##    .partB_gptsb8       0.000                               0.000    0.000
##    .partB_gptsb9       0.000                               0.000    0.000
##    .partB_gpts10       0.000                               0.000    0.000
##     reference          0.000                               0.000    0.000
##     persecutory        0.000                               0.000    0.000
##
## Thresholds:
##                     Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     PartA_gpts1|t1     0.477    0.044   10.727    0.000    0.477    0.477
##     PartA_gpts1|t2     1.016    0.052   19.653    0.000    1.016    1.016
##     PartA_gpts1|t3     1.369    0.061   22.491    0.000    1.369    1.369
##     PartA_gpts1|t4     1.847    0.083   22.228    0.000    1.847    1.847
##     PartA_gpts2|t1     0.632    0.046   13.781    0.000    0.632    0.632
##     PartA_gpts2|t2     1.180    0.055   21.299    0.000    1.180    1.180
##     PartA_gpts2|t3     1.615    0.070   22.912    0.000    1.615    1.615
##     PartA_gpts2|t4     2.086    0.101   20.616    0.000    2.086    2.086
##     PartA_gpts3|t1    -0.025    0.043   -0.578    0.563   -0.025   -0.025
##     PartA_gpts3|t2     0.480    0.044   10.794    0.000    0.480    0.480
##     PartA_gpts3|t3     0.871    0.049   17.748    0.000    0.871    0.871
##     PartA_gpts3|t4     1.439    0.063   22.738    0.000    1.439    1.439
##     PartA_gpts4|t1     0.422    0.044    9.586    0.000    0.422    0.422
##     PartA_gpts4|t2     0.875    0.049   17.810    0.000    0.875    0.875
##     PartA_gpts4|t3     1.259    0.058   21.891    0.000    1.259    1.259
##     PartA_gpts4|t4     1.671    0.073   22.838    0.000    1.671    1.671
##     PartA_gpts5|t1     0.320    0.043    7.361    0.000    0.320    0.320
##     PartA_gpts5|t2     0.716    0.047   15.280    0.000    0.716    0.716
##     PartA_gpts5|t3     1.055    0.052   20.101    0.000    1.055    1.055
##     PartA_gpts5|t4     1.544    0.067   22.918    0.000    1.544    1.544
##     PartA_gpts6|t1     0.329    0.043    7.564    0.000    0.329    0.329
##     PartA_gpts6|t2     0.879    0.049   17.871    0.000    0.879    0.879
##     PartA_gpts6|t3     1.259    0.058   21.891    0.000    1.259    1.259
##     PartA_gpts6|t4     1.707    0.075   22.758    0.000    1.707    1.707
##     PartA_gpts7|t1    -0.221    0.043   -5.127    0.000   -0.221   -0.221
##     PartA_gpts7|t2     0.191    0.043    4.449    0.000    0.191    0.191
##     PartA_gpts7|t3     0.608    0.046   13.320    0.000    0.608    0.608
##     PartA_gpts7|t4     1.151    0.055   21.053    0.000    1.151    1.151
##     prtB_gptsb1|t1     0.556    0.045   12.327    0.000    0.556    0.556
##     prtB_gptsb1|t2     1.045    0.052   19.991    0.000    1.045    1.045
##     prtB_gptsb1|t3     1.384    0.061   22.552    0.000    1.384    1.384
```

```
##     prtB_gptsb1|t4    1.787    0.079   22.498    0.000    1.787    1.787
##     prtB_gptsb2|t1    1.001    0.051   19.481    0.000    1.001    1.001
##     prtB_gptsb2|t2    1.414    0.062   22.664    0.000    1.414    1.414
##     prtB_gptsb2|t3    1.694    0.074   22.788    0.000    1.694    1.694
##     prtB_gptsb2|t4    2.061    0.099   20.820    0.000    2.061    2.061
##     prtB_gptsb3|t1    0.448    0.044   10.123    0.000    0.448    0.448
##     prtB_gptsb3|t2    0.809    0.048   16.813    0.000    0.809    0.809
##     prtB_gptsb3|t3    1.180    0.055   21.299    0.000    1.180    1.180
##     prtB_gptsb3|t4    1.682    0.074   22.815    0.000    1.682    1.682
##     prtB_gptsb4|t1    1.016    0.052   19.653    0.000    1.016    1.016
##     prtB_gptsb4|t2    1.326    0.059   22.286    0.000    1.326    1.326
##     prtB_gptsb4|t3    1.626    0.071   22.902    0.000    1.626    1.626
##     prtB_gptsb4|t4    1.915    0.088   21.853    0.000    1.915    1.915
##     prtB_gptsb5|t1    0.789    0.048   16.497    0.000    0.789    0.789
##     prtB_gptsb5|t2    1.086    0.053   20.429    0.000    1.086    1.086
##     prtB_gptsb5|t3    1.376    0.061   22.522    0.000    1.376    1.376
##     prtB_gptsb5|t4    1.773    0.079   22.552    0.000    1.773    1.773
##     prtB_gptsb6|t1    0.590    0.045   12.990    0.000    0.590    0.590
##     prtB_gptsb6|t2    0.945    0.050   18.779    0.000    0.945    0.945
##     prtB_gptsb6|t3    1.285    0.058   22.057    0.000    1.285    1.285
##     prtB_gptsb6|t4    1.682    0.074   22.815    0.000    1.682    1.682
##     prtB_gptsb7|t1    1.113    0.054   20.694    0.000    1.113    1.113
##     prtB_gptsb7|t2    1.422    0.063   22.690    0.000    1.422    1.422
##     prtB_gptsb7|t3    1.732    0.076   22.688    0.000    1.732    1.732
##     prtB_gptsb7|t4    2.140    0.106   20.149    0.000    2.140    2.140
##     prtB_gptsb8|t1    0.601    0.046   13.188    0.000    0.601    0.601
##     prtB_gptsb8|t2    0.897    0.049   18.116    0.000    0.897    0.897
##     prtB_gptsb8|t3    1.197    0.056   21.443    0.000    1.197    1.197
##     prtB_gptsb8|t4    1.564    0.068   22.926    0.000    1.564    1.564
##     prtB_gptsb9|t1    0.739    0.047   15.667    0.000    0.739    0.739
##     prtB_gptsb9|t2    1.140    0.054   20.952    0.000    1.140    1.140
##     prtB_gptsb9|t3    1.573    0.069   22.928    0.000    1.573    1.573
##     prtB_gptsb9|t4    1.915    0.088   21.853    0.000    1.915    1.915
##     prtB_gpts10|t1    0.675    0.046   14.566    0.000    0.675    0.675
##     prtB_gpts10|t2    0.973    0.051   19.133    0.000    0.973    0.973
##     prtB_gpts10|t3    1.333    0.060   22.322    0.000    1.333    1.333
##     prtB_gpts10|t4    1.648    0.072   22.876    0.000    1.648    1.648
##
## Variances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .PartA_gptsa1      0.324                               0.324    0.324
##    .PartA_gptsa2      0.336                               0.336    0.336
##    .PartA_gptsa3      0.452                               0.452    0.452
##    .PartA_gptsa4      0.189                               0.189    0.189
##    .PartA_gptsa5      0.319                               0.319    0.319
##    .PartA_gptsa6      0.262                               0.262    0.262
##    .PartA_gptsa7      0.387                               0.387    0.387
##    .partB_gptsb1      0.311                               0.311    0.311
##    .partB_gptsb2      0.191                               0.191    0.191
##    .partB_gptsb3      0.278                               0.278    0.278
##    .partB_gptsb4      0.208                               0.208    0.208
##    .partB_gptsb5      0.172                               0.172    0.172
##    .partB_gptsb6      0.166                               0.166    0.166
##    .partB_gptsb7      0.220                               0.220    0.220
```

```
##    .partB_gptsb8      0.160                                    0.160    0.160
##    .partB_gptsb9      0.212                                    0.212    0.212
##    .partB_gpts10      0.254                                    0.254    0.254
##     reference         1.000                                    1.000    1.000
##     persecutory       1.000                                    1.000    1.000
##
## Scales y*:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     PartA_gptsa1      1.000                                    1.000    1.000
##     PartA_gptsa2      1.000                                    1.000    1.000
##     PartA_gptsa3      1.000                                    1.000    1.000
##     PartA_gptsa4      1.000                                    1.000    1.000
##     PartA_gptsa5      1.000                                    1.000    1.000
##     PartA_gptsa6      1.000                                    1.000    1.000
##     PartA_gptsa7      1.000                                    1.000    1.000
##     partB_gptsb1      1.000                                    1.000    1.000
##     partB_gptsb2      1.000                                    1.000    1.000
##     partB_gptsb3      1.000                                    1.000    1.000
##     partB_gptsb4      1.000                                    1.000    1.000
##     partB_gptsb5      1.000                                    1.000    1.000
##     partB_gptsb6      1.000                                    1.000    1.000
##     partB_gptsb7      1.000                                    1.000    1.000
##     partB_gptsb8      1.000                                    1.000    1.000
##     partB_gptsb9      1.000                                    1.000    1.000
##     partB_gpts10      1.000                                    1.000    1.000
```

summary of fit measures for three models of GPTSA

deleted models 3 to 5 since they did not differ significantly from model 2

```
##        chisq.scaled           df.scaled chisq.scaling.factor
##             425.135             134.000                0.585
##          cfi.scaled          tli.scaled         rmsea.scaled
##               0.989               0.987                0.050
##                srmr
##               0.033
```

```
##        chisq.scaled           df.scaled chisq.scaling.factor
##             389.246             118.000                0.569
##          cfi.scaled          tli.scaled         rmsea.scaled
##               0.989               0.987                0.052
##                srmr
##               0.033
```

MUSEQ is next

Model 1

```
##        chisq.scaled           df.scaled chisq.scaling.factor
##            2930.988             804.000                1.128
##          cfi.scaled          tli.scaled         rmsea.scaled
##               0.899               0.892                0.062
```

```
##                srmr
##               0.063

## For constructs with categorical indicators, the alpha and the average variance extracted are calcula

##         auditory    visual olfactory gustatory    bodily  presence
## alpha  0.8344134 0.8650326 0.8954536 0.9077042 0.9057060 0.8694990
## omega  0.8033959 0.8321705 0.8673721 0.8772246 0.8841962 0.8351232
## omega2 0.8033959 0.8321705 0.8673721 0.8772246 0.8841962 0.8351232
## omega3 0.8236923 0.8596939 0.8992562 0.9185328 0.9074923 0.8521143
## avevar 0.4381763 0.4620095 0.5780030 0.5811473 0.5702036 0.6450147

##            lhs op     rhs      mi   epc sepc.lv sepc.all sepc.nox
## 1141  MUSEQ3_3 ~~ MUSEQ4_3 210.112 0.323   0.323    0.735    0.735
## 395   auditory =~ MUSEQ6_1  94.638 0.439   0.439    0.439    0.439
## 661    MUSEQ_3 ~~ MUSEQ2_3  85.775 0.301   0.301    0.476    0.476
## 1204  MUSEQ3_6 ~~ MUSEQ3_7  83.931 0.217   0.217    0.613    0.613
## 477  gustatory =~ MUSEQ2_3  82.367 0.392   0.392    0.392    0.392
## 450  olfactory =~ MUSEQ4_3  80.065 0.612   0.612    0.612    0.612
## 429     visual =~ MUSEQ6_1  77.930 0.431   0.431    0.431    0.431
## 532     bodily =~ MUSEQ6_1  71.718 0.360   0.360    0.360    0.360
## 442  olfactory =~ MUSEQ2_3  68.029 0.319   0.319    0.319    0.319
## 1432  MUSEQ6_2 ~~ MUSEQ6_3  67.581 0.279   0.279    0.663    0.663
```

Model 2 without items 3.3 i 4.3

```
##         chisq.scaled            df.scaled chisq.scaling.factor
##             2374.362              725.000                1.082
##           cfi.scaled           tli.scaled         rmsea.scaled
##                0.916                0.910                0.057
##                 srmr
##                0.060

##            lhs op     rhs      mi   epc sepc.lv sepc.all sepc.nox
## 631    MUSEQ_3 ~~ MUSEQ2_3 100.753 0.326   0.326    0.492    0.492
## 377   auditory =~ MUSEQ6_1  99.648 0.456   0.456    0.456    0.456
## 409     visual =~ MUSEQ6_1  84.801 0.458   0.458    0.458    0.458
## 508     bodily =~ MUSEQ6_1  76.303 0.376   0.376    0.376    0.376
## 1325  MUSEQ6_2 ~~ MUSEQ6_3  67.317 0.279   0.279    0.666    0.666
## 1118  MUSEQ3_6 ~~ MUSEQ3_7  66.341 0.201   0.201    0.599    0.599
## 1313  MUSEQ5_7 ~~ MUSEQ5_8  55.788 0.190   0.190    0.502    0.502
## 662    MUSEQ_4 ~~  MUSEQ_5  52.986 0.211   0.211    0.331    0.331
## 547   presence =~ MUSEQ5_8  50.197 0.283   0.283    0.283    0.283
## 455  gustatory =~ MUSEQ2_2  49.646 0.296   0.296    0.296    0.296
```

Comparison between models 1 and 2 of MUSEQ

```
## [1] "chisq.diff: " "475.027"      "p value: "    "0"
```

Model 3 without item 6.1

```
## chisq.scaled    df.scaled   cfi.scaled   tli.scaled rmsea.scaled         srmr
##     2185.913      687.000        0.922        0.916        0.056        0.058
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##         auditory    visual olfactory gustatory    bodily  presence
## alpha  0.8344134 0.8650326 0.8894462 0.9066283 0.9057060 0.8493407
## omega  0.8027678 0.8310620 0.8565348 0.8722275 0.8840501 0.7784855
## omega2 0.8027678 0.8310620 0.8565348 0.8722275 0.8840501 0.7784855
## omega3 0.8219198 0.8556483 0.8827242 0.8989991 0.9071091 0.7935248
## avevar 0.4378164 0.4619508 0.5986320 0.6068100 0.5702232 0.6753243
```

Comparison between models 2 and 3 of MUSEQ

```
## [1] "chisq.diff: " "166.467"      "p value: "    "0"
```

Summary of model 3 MUSEQ

```
## lavaan 0.6-8 ended normally after 31 iterations
##
##   Estimator                                       DWLS
##   Optimization method                           NLMINB
##   Number of model parameters                       210
##
##   Number of observations                           692
##
## Model Test User Model:
##                                               Standard      Robust
##   Test Statistic                              1962.442    2185.913
##   Degrees of freedom                               687         687
##   P-value (Chi-square)                           0.000       0.000
##   Scaling correction factor                                  1.053
##   Shift parameter                                          322.349
##        simple second-order correction
##
## Parameter Estimates:
##
##   Standard errors                           Robust.sem
##   Information                                 Expected
##   Information saturated (h1) model        Unstructured
##
## Latent Variables:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   auditory =~
##     MUSEQ_1           0.668    0.027   24.872    0.000    0.668    0.668
##     MUSEQ_2           0.652    0.030   21.741    0.000    0.652    0.652
##     MUSEQ_3           0.590    0.036   16.223    0.000    0.590    0.590
##     MUSEQ_4           0.633    0.030   21.419    0.000    0.633    0.633
##     MUSEQ_5           0.567    0.031   18.257    0.000    0.567    0.567
##     MUSEQ_6           0.693    0.027   25.731    0.000    0.693    0.693
```

```
##     MUSEQ_7           0.801    0.022   35.991    0.000    0.801    0.801
##   visual =~
##     MUSEQ2_1          0.724    0.023   31.987    0.000    0.724    0.724
##     MUSEQ2_2          0.716    0.027   26.998    0.000    0.716    0.716
##     MUSEQ2_3          0.578    0.031   18.895    0.000    0.578    0.578
##     MUSEQ2_4          0.570    0.030   18.766    0.000    0.570    0.570
##     MUSEQ2_5          0.726    0.026   28.266    0.000    0.726    0.726
##     MUSEQ2_6          0.664    0.035   18.895    0.000    0.664    0.664
##     MUSEQ2_7          0.711    0.024   29.741    0.000    0.711    0.711
##     MUSEQ2_8          0.726    0.025   29.608    0.000    0.726    0.726
##   olfactory =~
##     MUSEQ3_1          0.758    0.022   33.828    0.000    0.758    0.758
##     MUSEQ3_2          0.746    0.024   30.618    0.000    0.746    0.746
##     MUSEQ3_4          0.768    0.028   26.995    0.000    0.768    0.768
##     MUSEQ3_5          0.735    0.024   31.144    0.000    0.735    0.735
##     MUSEQ3_6          0.822    0.020   41.110    0.000    0.822    0.822
##     MUSEQ3_7          0.810    0.021   38.924    0.000    0.810    0.810
##   gustatory =~
##     MUSEQ4_1          0.751    0.021   35.901    0.000    0.751    0.751
##     MUSEQ4_2          0.789    0.020   39.805    0.000    0.789    0.789
##     MUSEQ4_4          0.706    0.025   27.818    0.000    0.706    0.706
##     MUSEQ4_5          0.790    0.023   34.995    0.000    0.790    0.790
##     MUSEQ4_6          0.800    0.019   42.303    0.000    0.800    0.800
##     MUSEQ4_7          0.778    0.024   32.816    0.000    0.778    0.778
##     MUSEQ4_8          0.832    0.025   32.835    0.000    0.832    0.832
##   bodily =~
##     MUSEQ5_1          0.787    0.019   42.413    0.000    0.787    0.787
##     MUSEQ5_2          0.803    0.017   46.823    0.000    0.803    0.803
##     MUSEQ5_3          0.765    0.021   35.991    0.000    0.765    0.765
##     MUSEQ5_4          0.694    0.030   23.397    0.000    0.694    0.694
##     MUSEQ5_5          0.743    0.021   35.028    0.000    0.743    0.743
##     MUSEQ5_6          0.672    0.025   27.270    0.000    0.672    0.672
##     MUSEQ5_7          0.795    0.021   38.535    0.000    0.795    0.795
##     MUSEQ5_8          0.771    0.024   32.742    0.000    0.771    0.771
##   presence =~
##     MUSEQ6_2          0.792    0.036   22.083    0.000    0.792    0.792
##     MUSEQ6_3          0.870    0.039   22.511    0.000    0.870    0.870
##     MUSEQ6_4          0.802    0.042   18.947    0.000    0.802    0.802
##
## Covariances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   auditory ~~
##     visual            0.811    0.022   37.405    0.000    0.811    0.811
##     olfactory         0.580    0.034   16.836    0.000    0.580    0.580
##     gustatory         0.660    0.029   22.626    0.000    0.660    0.660
##     bodily            0.740    0.024   30.968    0.000    0.740    0.740
##     presence          0.406    0.043    9.352    0.000    0.406    0.406
##   visual ~~
##     olfactory         0.635    0.032   19.789    0.000    0.635    0.635
##     gustatory         0.675    0.029   23.132    0.000    0.675    0.675
##     bodily            0.761    0.025   30.880    0.000    0.761    0.761
##     presence          0.516    0.040   12.787    0.000    0.516    0.516
##   olfactory ~~
##     gustatory         0.787    0.022   35.367    0.000    0.787    0.787
```

```
##     bodily            0.654    0.029   22.568    0.000    0.654    0.654
##     presence          0.401    0.046    8.646    0.000    0.401    0.401
##   gustatory ~~
##     bodily            0.704    0.026   27.072    0.000    0.704    0.704
##     presence          0.426    0.046    9.163    0.000    0.426    0.426
##   bodily ~~
##     presence          0.446    0.040   11.112    0.000    0.446    0.446
##
## Intercepts:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .MUSEQ_1           0.000                               0.000    0.000
##    .MUSEQ_2           0.000                               0.000    0.000
##    .MUSEQ_3           0.000                               0.000    0.000
##    .MUSEQ_4           0.000                               0.000    0.000
##    .MUSEQ_5           0.000                               0.000    0.000
##    .MUSEQ_6           0.000                               0.000    0.000
##    .MUSEQ_7           0.000                               0.000    0.000
##    .MUSEQ2_1          0.000                               0.000    0.000
##    .MUSEQ2_2          0.000                               0.000    0.000
##    .MUSEQ2_3          0.000                               0.000    0.000
##    .MUSEQ2_4          0.000                               0.000    0.000
##    .MUSEQ2_5          0.000                               0.000    0.000
##    .MUSEQ2_6          0.000                               0.000    0.000
##    .MUSEQ2_7          0.000                               0.000    0.000
##    .MUSEQ2_8          0.000                               0.000    0.000
##    .MUSEQ3_1          0.000                               0.000    0.000
##    .MUSEQ3_2          0.000                               0.000    0.000
##    .MUSEQ3_4          0.000                               0.000    0.000
##    .MUSEQ3_5          0.000                               0.000    0.000
##    .MUSEQ3_6          0.000                               0.000    0.000
##    .MUSEQ3_7          0.000                               0.000    0.000
##    .MUSEQ4_1          0.000                               0.000    0.000
##    .MUSEQ4_2          0.000                               0.000    0.000
##    .MUSEQ4_4          0.000                               0.000    0.000
##    .MUSEQ4_5          0.000                               0.000    0.000
##    .MUSEQ4_6          0.000                               0.000    0.000
##    .MUSEQ4_7          0.000                               0.000    0.000
##    .MUSEQ4_8          0.000                               0.000    0.000
##    .MUSEQ5_1          0.000                               0.000    0.000
##    .MUSEQ5_2          0.000                               0.000    0.000
##    .MUSEQ5_3          0.000                               0.000    0.000
##    .MUSEQ5_4          0.000                               0.000    0.000
##    .MUSEQ5_5          0.000                               0.000    0.000
##    .MUSEQ5_6          0.000                               0.000    0.000
##    .MUSEQ5_7          0.000                               0.000    0.000
##    .MUSEQ5_8          0.000                               0.000    0.000
##    .MUSEQ6_2          0.000                               0.000    0.000
##    .MUSEQ6_3          0.000                               0.000    0.000
##    .MUSEQ6_4          0.000                               0.000    0.000
##     auditory          0.000                               0.000    0.000
##     visual            0.000                               0.000    0.000
##     olfactory         0.000                               0.000    0.000
##     gustatory         0.000                               0.000    0.000
##     bodily            0.000                               0.000    0.000
```

```
##     presence          0.000                               0.000    0.000
##
## Thresholds:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     MUSEQ_1|t1       -0.788    0.053  -14.739    0.000   -0.788   -0.788
##     MUSEQ_1|t2       -0.051    0.048   -1.064    0.288   -0.051   -0.051
##     MUSEQ_1|t3        0.527    0.050   10.504    0.000    0.527    0.527
##     MUSEQ_1|t4        1.275    0.065   19.671    0.000    1.275    1.275
##     MUSEQ_2|t1       -0.268    0.048   -5.540    0.000   -0.268   -0.268
##     MUSEQ_2|t2        0.193    0.048    4.024    0.000    0.193    0.193
##     MUSEQ_2|t3        0.478    0.050    9.608    0.000    0.478    0.478
##     MUSEQ_2|t4        1.099    0.060   18.389    0.000    1.099    1.099
##     MUSEQ_3|t1       -1.023    0.058  -17.651    0.000   -1.023   -1.023
##     MUSEQ_3|t2       -0.674    0.052  -13.012    0.000   -0.674   -0.674
##     MUSEQ_3|t3       -0.398    0.049   -8.107    0.000   -0.398   -0.398
##     MUSEQ_3|t4        0.309    0.049    6.372    0.000    0.309    0.309
##     MUSEQ_4|t1       -0.854    0.055  -15.651    0.000   -0.854   -0.854
##     MUSEQ_4|t2        0.018    0.048    0.380    0.704    0.018    0.018
##     MUSEQ_4|t3        0.656    0.052   12.720    0.000    0.656    0.656
##     MUSEQ_4|t4        1.762    0.087   20.202    0.000    1.762    1.762
##     MUSEQ_5|t1       -0.730    0.053  -13.881    0.000   -0.730   -0.730
##     MUSEQ_5|t2       -0.011    0.048   -0.228    0.820   -0.011   -0.011
##     MUSEQ_5|t3        0.548    0.050   10.876    0.000    0.548    0.548
##     MUSEQ_5|t4        1.439    0.071   20.334    0.000    1.439    1.439
##     MUSEQ_6|t1       -0.355    0.049   -7.278    0.000   -0.355   -0.355
##     MUSEQ_6|t2        0.305    0.048    6.296    0.000    0.305    0.305
##     MUSEQ_6|t3        0.749    0.053   14.169    0.000    0.749    0.749
##     MUSEQ_6|t4        1.418    0.070   20.280    0.000    1.418    1.418
##     MUSEQ_7|t1       -0.087    0.048   -1.823    0.068   -0.087   -0.087
##     MUSEQ_7|t2        0.754    0.053   14.240    0.000    0.754    0.754
##     MUSEQ_7|t3        1.251    0.064   19.530    0.000    1.251    1.251
##     MUSEQ_7|t4        2.020    0.107   18.903    0.000    2.020    2.020
##     MUSEQ2_1|t1      -0.849    0.054  -15.582    0.000   -0.849   -0.849
##     MUSEQ2_1|t2      -0.040    0.048   -0.836    0.403   -0.040   -0.040
##     MUSEQ2_1|t3       0.552    0.050   10.950    0.000    0.552    0.552
##     MUSEQ2_1|t4       1.537    0.075   20.491    0.000    1.537    1.537
##     MUSEQ2_2|t1      -0.167    0.048   -3.493    0.000   -0.167   -0.167
##     MUSEQ2_2|t2       0.418    0.049    8.483    0.000    0.418    0.418
##     MUSEQ2_2|t3       0.870    0.055   15.859    0.000    0.870    0.870
##     MUSEQ2_2|t4       1.561    0.076   20.502    0.000    1.561    1.561
##     MUSEQ2_3|t1      -0.544    0.050  -10.801    0.000   -0.544   -0.544
##     MUSEQ2_3|t2       0.043    0.048    0.912    0.362    0.043    0.043
##     MUSEQ2_3|t3       0.378    0.049    7.730    0.000    0.378    0.378
##     MUSEQ2_3|t4       0.913    0.056   16.405    0.000    0.913    0.913
##     MUSEQ2_4|t1      -0.778    0.053  -14.597    0.000   -0.778   -0.778
##     MUSEQ2_4|t2      -0.123    0.048   -2.583    0.010   -0.123   -0.123
##     MUSEQ2_4|t3       0.283    0.048    5.842    0.000    0.283    0.283
##     MUSEQ2_4|t4       0.941    0.056   16.740    0.000    0.941    0.941
##     MUSEQ2_5|t1       0.069    0.048    1.443    0.149    0.069    0.069
##     MUSEQ2_5|t2       0.625    0.051   12.206    0.000    0.625    0.625
##     MUSEQ2_5|t3       1.011    0.058   17.524    0.000    1.011    1.011
##     MUSEQ2_5|t4       1.816    0.091   20.009    0.000    1.816    1.816
##     MUSEQ2_6|t1       0.612    0.051   11.986    0.000    0.612    0.612
##     MUSEQ2_6|t2       1.119    0.060   18.565    0.000    1.119    1.119
```

```
##     MUSEQ2_6|t3       1.525    0.074   20.482    0.000    1.525    1.525
##     MUSEQ2_6|t4       2.147    0.120   17.961    0.000    2.147    2.147
##     MUSEQ2_7|t1      -0.946    0.056  -16.807    0.000   -0.946   -0.946
##     MUSEQ2_7|t2      -0.193    0.048   -4.024    0.000   -0.193   -0.193
##     MUSEQ2_7|t3       0.398    0.049    8.107    0.000    0.398    0.398
##     MUSEQ2_7|t4       1.106    0.060   18.448    0.000    1.106    1.106
##     MUSEQ2_8|t1       0.029    0.048    0.608    0.543    0.029    0.029
##     MUSEQ2_8|t2       0.716    0.052   13.665    0.000    0.716    0.716
##     MUSEQ2_8|t3       1.183    0.062   19.070    0.000    1.183    1.183
##     MUSEQ2_8|t4       1.897    0.097   19.637    0.000    1.897    1.897
##     MUSEQ3_1|t1      -0.227    0.048   -4.707    0.000   -0.227   -0.227
##     MUSEQ3_1|t2       0.519    0.050   10.355    0.000    0.519    0.519
##     MUSEQ3_1|t3       0.993    0.057   17.331    0.000    0.993    0.993
##     MUSEQ3_1|t4       1.855    0.093   19.842    0.000    1.855    1.855
##     MUSEQ3_2|t1      -0.080    0.048   -1.671    0.095   -0.080   -0.080
##     MUSEQ3_2|t2       0.433    0.049    8.783    0.000    0.433    0.433
##     MUSEQ3_2|t3       0.788    0.053   14.739    0.000    0.788    0.788
##     MUSEQ3_2|t4       1.418    0.070   20.280    0.000    1.418    1.418
##     MUSEQ3_4|t1       0.556    0.050   11.024    0.000    0.556    0.556
##     MUSEQ3_4|t2       1.113    0.060   18.507    0.000    1.113    1.113
##     MUSEQ3_4|t3       1.514    0.074   20.470    0.000    1.514    1.514
##     MUSEQ3_4|t4       2.226    0.129   17.296    0.000    2.226    2.226
##     MUSEQ3_5|t1      -0.054    0.048   -1.140    0.254   -0.054   -0.054
##     MUSEQ3_5|t2       0.674    0.052   13.012    0.000    0.674    0.674
##     MUSEQ3_5|t3       1.119    0.060   18.565    0.000    1.119    1.119
##     MUSEQ3_5|t4       2.049    0.110   18.705    0.000    2.049    2.049
##     MUSEQ3_6|t1       0.260    0.048    5.388    0.000    0.260    0.260
##     MUSEQ3_6|t2       0.854    0.055   15.651    0.000    0.854    0.854
##     MUSEQ3_6|t3       1.291    0.065   19.761    0.000    1.291    1.291
##     MUSEQ3_6|t4       1.967    0.102   19.242    0.000    1.967    1.967
##     MUSEQ3_7|t1       0.256    0.048    5.313    0.000    0.256    0.256
##     MUSEQ3_7|t2       0.854    0.055   15.651    0.000    0.854    0.854
##     MUSEQ3_7|t3       1.259    0.064   19.578    0.000    1.259    1.259
##     MUSEQ3_7|t4       2.049    0.110   18.705    0.000    2.049    2.049
##     MUSEQ4_1|t1      -0.036    0.048   -0.760    0.447   -0.036   -0.036
##     MUSEQ4_1|t2       0.886    0.055   16.065    0.000    0.886    0.886
##     MUSEQ4_1|t3       1.491    0.073   20.441    0.000    1.491    1.491
##     MUSEQ4_1|t4       2.379    0.150   15.871    0.000    2.379    2.379
##     MUSEQ4_2|t1       0.040    0.048    0.836    0.403    0.040    0.040
##     MUSEQ4_2|t2       0.688    0.052   13.230    0.000    0.688    0.688
##     MUSEQ4_2|t3       1.175    0.062   19.015    0.000    1.175    1.175
##     MUSEQ4_2|t4       1.993    0.104   19.081    0.000    1.993    1.993
##     MUSEQ4_4|t1      -0.215    0.048   -4.479    0.000   -0.215   -0.215
##     MUSEQ4_4|t2       0.347    0.049    7.127    0.000    0.347    0.347
##     MUSEQ4_4|t3       0.902    0.055   16.269    0.000    0.902    0.902
##     MUSEQ4_4|t4       1.780    0.088   20.145    0.000    1.780    1.780
##     MUSEQ4_5|t1       0.268    0.048    5.540    0.000    0.268    0.268
##     MUSEQ4_5|t2       0.969    0.057   17.071    0.000    0.969    0.969
##     MUSEQ4_5|t3       1.503    0.073   20.457    0.000    1.503    1.503
##     MUSEQ4_5|t4       2.322    0.141   16.421    0.000    2.322    2.322
##     MUSEQ4_6|t1       0.171    0.048    3.569    0.000    0.171    0.171
##     MUSEQ4_6|t2       0.778    0.053   14.597    0.000    0.778    0.778
##     MUSEQ4_6|t3       1.212    0.063   19.280    0.000    1.212    1.212
##     MUSEQ4_6|t4       2.185    0.124   17.650    0.000    2.185    2.185
```

```
##     MUSEQ4_7|t1       0.465    0.050    9.383    0.000    0.465    0.465
##     MUSEQ4_7|t2       1.023    0.058   17.651    0.000    1.023    1.023
##     MUSEQ4_7|t3       1.561    0.076   20.502    0.000    1.561    1.561
##     MUSEQ4_7|t4       2.322    0.141   16.421    0.000    2.322    2.322
##     MUSEQ4_8|t1       0.764    0.053   14.383    0.000    0.764    0.764
##     MUSEQ4_8|t2       1.389    0.069   20.188    0.000    1.389    1.389
##     MUSEQ4_8|t3       1.835    0.092   19.930    0.000    1.835    1.835
##     MUSEQ4_8|t4       2.525    0.175   14.404    0.000    2.525    2.525
##     MUSEQ5_1|t1      -0.716    0.052  -13.665    0.000   -0.716   -0.716
##     MUSEQ5_1|t2       0.091    0.048    1.899    0.058    0.091    0.091
##     MUSEQ5_1|t3       0.603    0.051   11.838    0.000    0.603    0.603
##     MUSEQ5_1|t4       1.380    0.068   20.155    0.000    1.380    1.380
##     MUSEQ5_2|t1      -0.730    0.053  -13.881    0.000   -0.730   -0.730
##     MUSEQ5_2|t2      -0.138    0.048   -2.886    0.004   -0.138   -0.138
##     MUSEQ5_2|t3       0.371    0.049    7.579    0.000    0.371    0.371
##     MUSEQ5_2|t4       1.126    0.060   18.623    0.000    1.126    1.126
##     MUSEQ5_3|t1      -0.351    0.049   -7.202    0.000   -0.351   -0.351
##     MUSEQ5_3|t2       0.175    0.048    3.645    0.000    0.175    0.175
##     MUSEQ5_3|t3       0.625    0.051   12.206    0.000    0.625    0.625
##     MUSEQ5_3|t4       1.243    0.064   19.481    0.000    1.243    1.243
##     MUSEQ5_4|t1       0.414    0.049    8.408    0.000    0.414    0.414
##     MUSEQ5_4|t2       0.833    0.054   15.373    0.000    0.833    0.833
##     MUSEQ5_4|t3       1.212    0.063   19.280    0.000    1.212    1.212
##     MUSEQ5_4|t4       1.612    0.079   20.492    0.000    1.612    1.612
##     MUSEQ5_5|t1      -0.539    0.050  -10.727    0.000   -0.539   -0.539
##     MUSEQ5_5|t2      -0.014    0.048   -0.304    0.761   -0.014   -0.014
##     MUSEQ5_5|t3       0.457    0.050    9.233    0.000    0.457    0.457
##     MUSEQ5_5|t4       1.113    0.060   18.507    0.000    1.113    1.113
##     MUSEQ5_6|t1      -0.076    0.048   -1.595    0.111   -0.076   -0.076
##     MUSEQ5_6|t2       0.453    0.050    9.158    0.000    0.453    0.453
##     MUSEQ5_6|t3       0.849    0.054   15.582    0.000    0.849    0.849
##     MUSEQ5_6|t4       1.459    0.072   20.382    0.000    1.459    1.459
##     MUSEQ5_7|t1       0.080    0.048    1.671    0.095    0.080    0.080
##     MUSEQ5_7|t2       0.702    0.052   13.448    0.000    0.702    0.702
##     MUSEQ5_7|t3       1.086    0.059   18.269    0.000    1.086    1.086
##     MUSEQ5_7|t4       1.682    0.082   20.403    0.000    1.682    1.682
##     MUSEQ5_8|t1       0.309    0.049    6.372    0.000    0.309    0.309
##     MUSEQ5_8|t2       1.029    0.058   17.715    0.000    1.029    1.029
##     MUSEQ5_8|t3       1.343    0.067   20.010    0.000    1.343    1.343
##     MUSEQ5_8|t4       1.993    0.104   19.081    0.000    1.993    1.993
##     MUSEQ6_2|t1       0.490    0.050    9.832    0.000    0.490    0.490
##     MUSEQ6_2|t2       1.183    0.062   19.070    0.000    1.183    1.183
##     MUSEQ6_2|t3       1.561    0.076   20.502    0.000    1.561    1.561
##     MUSEQ6_2|t4       2.112    0.116   18.238    0.000    2.112    2.112
##     MUSEQ6_3|t1       0.730    0.053   13.881    0.000    0.730    0.730
##     MUSEQ6_3|t2       1.418    0.070   20.280    0.000    1.418    1.418
##     MUSEQ6_3|t3       1.780    0.088   20.145    0.000    1.780    1.780
##     MUSEQ6_3|t4       2.079    0.113   18.484    0.000    2.079    2.079
##     MUSEQ6_4|t1       0.441    0.049    8.933    0.000    0.441    0.441
##     MUSEQ6_4|t2       1.283    0.065   19.716    0.000    1.283    1.283
##     MUSEQ6_4|t3       1.668    0.082   20.429    0.000    1.668    1.668
##     MUSEQ6_4|t4       2.185    0.124   17.650    0.000    2.185    2.185
##
## Variances:
```

```
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .MUSEQ_1           0.554                               0.554    0.554
##    .MUSEQ_2           0.575                               0.575    0.575
##    .MUSEQ_3           0.651                               0.651    0.651
##    .MUSEQ_4           0.599                               0.599    0.599
##    .MUSEQ_5           0.678                               0.678    0.678
##    .MUSEQ_6           0.519                               0.519    0.519
##    .MUSEQ_7           0.358                               0.358    0.358
##    .MUSEQ2_1          0.476                               0.476    0.476
##    .MUSEQ2_2          0.488                               0.488    0.488
##    .MUSEQ2_3          0.666                               0.666    0.666
##    .MUSEQ2_4          0.675                               0.675    0.675
##    .MUSEQ2_5          0.473                               0.473    0.473
##    .MUSEQ2_6          0.559                               0.559    0.559
##    .MUSEQ2_7          0.495                               0.495    0.495
##    .MUSEQ2_8          0.473                               0.473    0.473
##    .MUSEQ3_1          0.425                               0.425    0.425
##    .MUSEQ3_2          0.444                               0.444    0.444
##    .MUSEQ3_4          0.410                               0.410    0.410
##    .MUSEQ3_5          0.459                               0.459    0.459
##    .MUSEQ3_6          0.325                               0.325    0.325
##    .MUSEQ3_7          0.345                               0.345    0.345
##    .MUSEQ4_1          0.436                               0.436    0.436
##    .MUSEQ4_2          0.378                               0.378    0.378
##    .MUSEQ4_4          0.502                               0.502    0.502
##    .MUSEQ4_5          0.375                               0.375    0.375
##    .MUSEQ4_6          0.360                               0.360    0.360
##    .MUSEQ4_7          0.395                               0.395    0.395
##    .MUSEQ4_8          0.307                               0.307    0.307
##    .MUSEQ5_1          0.381                               0.381    0.381
##    .MUSEQ5_2          0.354                               0.354    0.354
##    .MUSEQ5_3          0.414                               0.414    0.414
##    .MUSEQ5_4          0.519                               0.519    0.519
##    .MUSEQ5_5          0.447                               0.447    0.447
##    .MUSEQ5_6          0.548                               0.548    0.548
##    .MUSEQ5_7          0.368                               0.368    0.368
##    .MUSEQ5_8          0.406                               0.406    0.406
##    .MUSEQ6_2          0.373                               0.373    0.373
##    .MUSEQ6_3          0.243                               0.243    0.243
##    .MUSEQ6_4          0.357                               0.357    0.357
##     auditory          1.000                               1.000    1.000
##     visual            1.000                               1.000    1.000
##     olfactory         1.000                               1.000    1.000
##     gustatory         1.000                               1.000    1.000
##     bodily            1.000                               1.000    1.000
##     presence          1.000                               1.000    1.000
##
## Scales y*:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     MUSEQ_1           1.000                               1.000    1.000
##     MUSEQ_2           1.000                               1.000    1.000
##     MUSEQ_3           1.000                               1.000    1.000
##     MUSEQ_4           1.000                               1.000    1.000
##     MUSEQ_5           1.000                               1.000    1.000
```

```
##     MUSEQ_6          1.000                                   1.000    1.000
##     MUSEQ_7          1.000                                   1.000    1.000
##     MUSEQ2_1         1.000                                   1.000    1.000
##     MUSEQ2_2         1.000                                   1.000    1.000
##     MUSEQ2_3         1.000                                   1.000    1.000
##     MUSEQ2_4         1.000                                   1.000    1.000
##     MUSEQ2_5         1.000                                   1.000    1.000
##     MUSEQ2_6         1.000                                   1.000    1.000
##     MUSEQ2_7         1.000                                   1.000    1.000
##     MUSEQ2_8         1.000                                   1.000    1.000
##     MUSEQ3_1         1.000                                   1.000    1.000
##     MUSEQ3_2         1.000                                   1.000    1.000
##     MUSEQ3_4         1.000                                   1.000    1.000
##     MUSEQ3_5         1.000                                   1.000    1.000
##     MUSEQ3_6         1.000                                   1.000    1.000
##     MUSEQ3_7         1.000                                   1.000    1.000
##     MUSEQ4_1         1.000                                   1.000    1.000
##     MUSEQ4_2         1.000                                   1.000    1.000
##     MUSEQ4_4         1.000                                   1.000    1.000
##     MUSEQ4_5         1.000                                   1.000    1.000
##     MUSEQ4_6         1.000                                   1.000    1.000
##     MUSEQ4_7         1.000                                   1.000    1.000
##     MUSEQ4_8         1.000                                   1.000    1.000
##     MUSEQ5_1         1.000                                   1.000    1.000
##     MUSEQ5_2         1.000                                   1.000    1.000
##     MUSEQ5_3         1.000                                   1.000    1.000
##     MUSEQ5_4         1.000                                   1.000    1.000
##     MUSEQ5_5         1.000                                   1.000    1.000
##     MUSEQ5_6         1.000                                   1.000    1.000
##     MUSEQ5_7         1.000                                   1.000    1.000
##     MUSEQ5_8         1.000                                   1.000    1.000
##     MUSEQ6_2         1.000                                   1.000    1.000
##     MUSEQ6_3         1.000                                   1.000    1.000
##     MUSEQ6_4         1.000                                   1.000    1.000
```

summary of fit measures for three models of MUSEQ

```
##        chisq.scaled            df.scaled chisq.scaling.factor
##            2930.988              804.000                1.128
##          cfi.scaled           tli.scaled         rmsea.scaled
##               0.899                0.892                0.062
##                srmr
##               0.063

##        chisq.scaled            df.scaled chisq.scaling.factor
##            2374.362              725.000                1.082
##          cfi.scaled           tli.scaled         rmsea.scaled
##               0.916                0.910                0.057
##                srmr
##               0.060

##        chisq.scaled            df.scaled chisq.scaling.factor
##            2185.913              687.000                1.053
```

```
##          cfi.scaled          tli.scaled        rmsea.scaled
##               0.922               0.916               0.056
##                srmr
##               0.058
```

Analiza BAPS

1st model

```
## chisq.scaled    df.scaled   cfi.scaled   tli.scaled rmsea.scaled         srmr
##     1130.643      132.000        0.968        0.962        0.085        0.082
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##        survival_strategy negative_beliefs normalizing_beliefs
## alpha          0.9238154        0.9367321           0.9294762
## omega          0.6783573        0.9137507           0.9129554
## omega2         0.6783573        0.9137507           0.9129554
## omega3         0.7118750        0.9250568           0.9475383
## avevar         0.7049489        0.7278750           0.7247391
```

```
##                     lhs op    rhs      mi    epc sepc.lv sepc.all sepc.nox
## 310              BAPS13 ~~ BAPS14 155.603  0.232   0.232    0.816    0.816
## 160 normalizing_beliefs =~  BAPS1 132.971  0.359   0.359    0.359    0.359
## 322              BAPS16 ~~ BAPS17 105.390  0.186   0.186    1.313    1.313
## 141   survival_strategy =~ BAPS12  62.149 -0.197  -0.197   -0.197   -0.197
## 171 normalizing_beliefs =~ BAPS12  53.847 -0.160  -0.160   -0.160   -0.160
## 220               BAPS4 ~~  BAPS5  53.497  0.185   0.185    0.872    0.872
## 186               BAPS1 ~~ BAPS16  53.061  0.248   0.248    0.902    0.902
## 155    negative_beliefs =~ BAPS14  51.477  0.147   0.147    0.147    0.147
## 290              BAPS10 ~~ BAPS12  44.995  0.132   0.132    1.015    1.015
## 317              BAPS14 ~~ BAPS17  38.219 -0.141  -0.141   -0.792   -0.792
```

Model 2 - without BAPS1

```
## chisq.scaled    df.scaled   cfi.scaled   tli.scaled rmsea.scaled         srmr
##      903.224      116.000        0.974        0.970        0.081        0.070
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##        survival_strategy negative_beliefs normalizing_beliefs
## alpha          0.9295837        0.9367321           0.9294762
## omega          0.8858424        0.9137498           0.9130740
## omega2         0.8858424        0.9137498           0.9130740
## omega3         0.9048820        0.9250671           0.9477461
## avevar         0.7414225        0.7279091           0.7247438
```

```
##                     lhs op    rhs      mi    epc sepc.lv sepc.all sepc.nox
## 284              BAPS13 ~~ BAPS14 148.545  0.229   0.229    0.813    0.813
## 296              BAPS16 ~~ BAPS17 114.235  0.197   0.197    1.387    1.387
## 134   survival_strategy =~ BAPS12  58.813 -0.206  -0.206   -0.206   -0.206
```

```
## 147    negative_beliefs =~ BAPS14  52.865  0.148   0.148    0.148    0.148
## 162 normalizing_beliefs =~ BAPS12  50.260 -0.157  -0.157   -0.157   -0.157
## 264              BAPS10 ~~ BAPS12  44.350  0.131   0.131    1.008    1.008
## 291              BAPS14 ~~ BAPS17  41.524 -0.148  -0.148   -0.847   -0.847
## 290              BAPS14 ~~ BAPS16  37.687 -0.149  -0.149   -0.676   -0.676
## 149    negative_beliefs =~ BAPS16  32.384 -0.128  -0.128   -0.128   -0.128
## 287              BAPS13 ~~ BAPS17  30.854 -0.132  -0.132   -0.731   -0.731
```

Comparison between model 1 and 2 of BAPS

```
## [1] "chisq.diff: " "200.528"      "p value: "    "0"
```

MODEL 3 with covariance added between BAPS13 i BAPS14

```
## chisq.scaled    df.scaled   cfi.scaled   tli.scaled rmsea.scaled         srmr
##      742.108      115.000        0.979        0.976        0.072        0.069
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##        survival_strategy negative_beliefs normalizing_beliefs
## alpha          0.9295837        0.9367321           0.9294762
## omega          0.8858410        0.9137363           0.8800942
## omega2         0.8858410        0.9137363           0.8800942
## omega3         0.9048735        0.9250082           0.8930653
## avevar         0.7414095        0.7278819           0.6919380
```

Comparison between model 2 and 3 of BAPS

```
## [1] "chisq.diff: " "74.144"       "p value: "    "0"
```

Summary of model 3 BAPS

```
## lavaan 0.6-8 ended normally after 28 iterations
##
##   Estimator                                         DWLS
##   Optimization method                             NLMINB
##   Number of model parameters                          72
##
##   Number of observations                            1047
##
## Model Test User Model:
##                                               Standard      Robust
##   Test Statistic                               604.967     742.108
##   Degrees of freedom                               115         115
##   P-value (Chi-square)                           0.000       0.000
##   Scaling correction factor                                  0.867
##   Shift parameter                                           44.069
##        simple second-order correction
##
## Parameter Estimates:
##
```

```
##   Standard errors                           Robust.sem
##   Information                                 Expected
##   Information saturated (h1) model        Unstructured
##
## Latent Variables:
##                          Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   survival_strategy =~
##     BAPS2                   0.855    0.019   45.756    0.000    0.855    0.855
##     BAPS3                   0.807    0.020   40.554    0.000    0.807    0.807
##     BAPS4                   0.898    0.013   69.106    0.000    0.898    0.898
##     BAPS5                   0.896    0.013   68.219    0.000    0.896    0.896
##     BAPS6                   0.846    0.019   43.521    0.000    0.846    0.846
##   negative_beliefs =~
##     BAPS7                   0.797    0.019   42.667    0.000    0.797    0.797
##     BAPS8                   0.782    0.017   46.898    0.000    0.782    0.782
##     BAPS9                   0.764    0.018   43.346    0.000    0.764    0.764
##     BAPS10                  0.926    0.008  113.813    0.000    0.926    0.926
##     BAPS11                  0.892    0.010   92.076    0.000    0.892    0.892
##     BAPS12                  0.940    0.007  125.622    0.000    0.940    0.940
##   normalizing_beliefs =~
##     BAPS13                  0.758    0.017   44.572    0.000    0.758    0.758
##     BAPS14                  0.777    0.016   47.806    0.000    0.777    0.777
##     BAPS15                  0.754    0.018   41.798    0.000    0.754    0.754
##     BAPS16                  0.910    0.008  109.522    0.000    0.910    0.910
##     BAPS17                  0.953    0.006  155.467    0.000    0.953    0.953
##     BAPS18                  0.818    0.014   60.507    0.000    0.818    0.818
##
## Covariances:
##                        Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##  .BAPS13 ~~
##   .BAPS14                 0.220    0.019   11.637    0.000    0.220    0.535
##   survival_strategy ~~
##     negative_belfs        0.414    0.033   12.470    0.000    0.414    0.414
##     normalzng_blfs        0.493    0.031   15.656    0.000    0.493    0.493
##   negative_beliefs ~~
##     normalzng_blfs        0.385    0.030   12.725    0.000    0.385    0.385
##
## Intercepts:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .BAPS2             0.000                               0.000    0.000
##    .BAPS3             0.000                               0.000    0.000
##    .BAPS4             0.000                               0.000    0.000
##    .BAPS5             0.000                               0.000    0.000
##    .BAPS6             0.000                               0.000    0.000
##    .BAPS7             0.000                               0.000    0.000
##    .BAPS8             0.000                               0.000    0.000
##    .BAPS9             0.000                               0.000    0.000
##    .BAPS10            0.000                               0.000    0.000
##    .BAPS11            0.000                               0.000    0.000
##    .BAPS12            0.000                               0.000    0.000
##    .BAPS13            0.000                               0.000    0.000
##    .BAPS14            0.000                               0.000    0.000
##    .BAPS15            0.000                               0.000    0.000
##    .BAPS16            0.000                               0.000    0.000
```

```
##    .BAPS17           0.000                               0.000    0.000
##    .BAPS18           0.000                               0.000    0.000
##     survivl_strtgy    0.000                               0.000    0.000
##     negative_belfs    0.000                               0.000    0.000
##     normalzng_blfs    0.000                               0.000    0.000
##
## Thresholds:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     BAPS2|t1          0.826    0.044   18.790    0.000    0.826    0.826
##     BAPS2|t2          1.621    0.064   25.204    0.000    1.621    1.621
##     BAPS2|t3          2.344    0.117   19.953    0.000    2.344    2.344
##     BAPS3|t1          0.566    0.041   13.781    0.000    0.566    0.566
##     BAPS3|t2          1.561    0.062   25.225    0.000    1.561    1.561
##     BAPS3|t3          2.383    0.122   19.488    0.000    2.383    2.383
##     BAPS4|t1          0.511    0.041   12.571    0.000    0.511    0.511
##     BAPS4|t2          1.308    0.054   24.415    0.000    1.308    1.308
##     BAPS4|t3          1.931    0.081   23.937    0.000    1.931    1.931
##     BAPS5|t1          0.143    0.039    3.675    0.000    0.143    0.143
##     BAPS5|t2          1.008    0.047   21.530    0.000    1.008    1.008
##     BAPS5|t3          1.603    0.064   25.218    0.000    1.603    1.603
##     BAPS6|t1          0.895    0.045   19.914    0.000    0.895    0.895
##     BAPS6|t2          1.728    0.069   24.978    0.000    1.728    1.728
##     BAPS6|t3          2.474    0.135   18.371    0.000    2.474    2.474
##     BAPS7|t1          0.586    0.041   14.202    0.000    0.586    0.586
##     BAPS7|t2          1.164    0.050   23.288    0.000    1.164    1.164
##     BAPS7|t3          1.761    0.071   24.862    0.000    1.761    1.761
##     BAPS8|t1         -0.580    0.041  -14.082    0.000   -0.580   -0.580
##     BAPS8|t2          0.165    0.039    4.230    0.000    0.165    0.165
##     BAPS8|t3          0.764    0.043   17.697    0.000    0.764    0.764
##     BAPS9|t1          0.028    0.039    0.710    0.477    0.028    0.028
##     BAPS9|t2          0.592    0.041   14.322    0.000    0.592    0.592
##     BAPS9|t3          1.169    0.050   23.333    0.000    1.169    1.169
##     BAPS10|t1        -0.155    0.039   -3.983    0.000   -0.155   -0.155
##     BAPS10|t2         0.506    0.041   12.450    0.000    0.506    0.506
##     BAPS10|t3         1.033    0.047   21.839    0.000    1.033    1.033
##     BAPS11|t1        -0.128    0.039   -3.304    0.001   -0.128   -0.128
##     BAPS11|t2         0.449    0.040   11.172    0.000    0.449    0.449
##     BAPS11|t3         0.928    0.045   20.409    0.000    0.928    0.928
##     BAPS12|t1         0.061    0.039    1.575    0.115    0.061    0.061
##     BAPS12|t2         0.612    0.042   14.742    0.000    0.612    0.612
##     BAPS12|t3         1.091    0.048   22.538    0.000    1.091    1.091
##     BAPS13|t1        -0.809    0.044  -18.504    0.000   -0.809   -0.809
##     BAPS13|t2         0.153    0.039    3.922    0.000    0.153    0.153
##     BAPS13|t3         0.885    0.045   19.748    0.000    0.885    0.885
##     BAPS14|t1        -0.698    0.042  -16.467    0.000   -0.698   -0.698
##     BAPS14|t2         0.348    0.040    8.786    0.000    0.348    0.348
##     BAPS14|t3         1.169    0.050   23.333    0.000    1.169    1.169
##     BAPS15|t1         0.085    0.039    2.193    0.028    0.085    0.085
##     BAPS15|t2         1.079    0.048   22.392    0.000    1.079    1.079
##     BAPS15|t3         1.833    0.075   24.535    0.000    1.833    1.833
##     BAPS16|t1        -0.250    0.039   -6.388    0.000   -0.250   -0.250
##     BAPS16|t2         0.867    0.045   19.468    0.000    0.867    0.867
##     BAPS16|t3         1.630    0.065   25.194    0.000    1.630    1.630
##     BAPS17|t1        -0.303    0.039   -7.680    0.000   -0.303   -0.303
```

```
##     BAPS17|t2         0.823    0.044   18.733    0.000    0.823    0.823
##     BAPS17|t3         1.450    0.058   25.052    0.000    1.450    1.450
##     BAPS18|t1        -0.138    0.039   -3.551    0.000   -0.138   -0.138
##     BAPS18|t2         0.966    0.046   20.950    0.000    0.966    0.966
##     BAPS18|t3         1.749    0.070   24.904    0.000    1.749    1.749
##
## Variances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .BAPS2             0.269                               0.269    0.269
##    .BAPS3             0.349                               0.349    0.349
##    .BAPS4             0.193                               0.193    0.193
##    .BAPS5             0.197                               0.197    0.197
##    .BAPS6             0.285                               0.285    0.285
##    .BAPS7             0.364                               0.364    0.364
##    .BAPS8             0.388                               0.388    0.388
##    .BAPS9             0.416                               0.416    0.416
##    .BAPS10            0.143                               0.143    0.143
##    .BAPS11            0.204                               0.204    0.204
##    .BAPS12            0.117                               0.117    0.117
##    .BAPS13            0.426                               0.426    0.426
##    .BAPS14            0.396                               0.396    0.396
##    .BAPS15            0.431                               0.431    0.431
##    .BAPS16            0.172                               0.172    0.172
##    .BAPS17            0.091                               0.091    0.091
##    .BAPS18            0.331                               0.331    0.331
##     survivl_strtgy    1.000                               1.000    1.000
##     negative_belfs    1.000                               1.000    1.000
##     normalzng_blfs    1.000                               1.000    1.000
##
## Scales y*:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     BAPS2             1.000                               1.000    1.000
##     BAPS3             1.000                               1.000    1.000
##     BAPS4             1.000                               1.000    1.000
##     BAPS5             1.000                               1.000    1.000
##     BAPS6             1.000                               1.000    1.000
##     BAPS7             1.000                               1.000    1.000
##     BAPS8             1.000                               1.000    1.000
##     BAPS9             1.000                               1.000    1.000
##     BAPS10            1.000                               1.000    1.000
##     BAPS11            1.000                               1.000    1.000
##     BAPS12            1.000                               1.000    1.000
##     BAPS13            1.000                               1.000    1.000
##     BAPS14            1.000                               1.000    1.000
##     BAPS15            1.000                               1.000    1.000
##     BAPS16            1.000                               1.000    1.000
##     BAPS17            1.000                               1.000    1.000
##     BAPS18            1.000                               1.000    1.000
```

summary of fit measures for three models of BAPS

```
##         chisq.scaled            df.scaled chisq.scaling.factor
##             1130.643              132.000                0.921
```

```
##          cfi.scaled          tli.scaled        rmsea.scaled
##               0.968               0.962               0.085
##                srmr
##               0.082
```

```
##        chisq.scaled           df.scaled chisq.scaling.factor
##             903.224             116.000               0.876
##          cfi.scaled          tli.scaled        rmsea.scaled
##               0.974               0.970               0.081
##                srmr
##               0.070
```

```
##        chisq.scaled           df.scaled chisq.scaling.factor
##             742.108             115.000               0.867
##          cfi.scaled          tli.scaled        rmsea.scaled
##               0.979               0.976               0.072
##                srmr
##               0.069
```

IVI analysis

```
## Warning in lav_model_vcov(lavmodel = lavmodel, lavsamplestats = lavsamplestats, : lavaan WARNING:
##     The variance-covariance matrix of the estimated parameters (vcov)
##     does not appear to be positive definite! The smallest eigenvalue
##     (= -1.661197e-17) is smaller than zero. This may be a symptom that
##     the model is not identified.
```

```
## lavaan 0.6-8 ended normally after 23 iterations
##
##   Estimator                                       DWLS
##   Optimization method                           NLMINB
##   Number of model parameters                       106
##
##   Number of observations                           433
##
## Model Test User Model:
##                                               Standard      Robust
##   Test Statistic                              1912.552    1165.127
##   Degrees of freedom                               296         296
##   P-value (Chi-square)                           0.000       0.000
##   Scaling correction factor                                  1.937
##   Shift parameter                                          177.912
##        simple second-order correction
##
## Model Test Baseline Model:
##
##   Test statistic                             17803.863    6278.569
##   Degrees of freedom                               325         325
##   P-value                                        0.000       0.000
##   Scaling correction factor                                  2.936
##
## User Model versus Baseline Model:
```

```
##
##   Comparative Fit Index (CFI)                    0.908       0.854
##   Tucker-Lewis Index (TLI)                       0.898       0.840
##
##   Robust Comparative Fit Index (CFI)                            NA
##   Robust Tucker-Lewis Index (TLI)                               NA
##
## Root Mean Square Error of Approximation:
##
##   RMSEA                                          0.112       0.082
##   90 Percent confidence interval - lower         0.108       0.077
##   90 Percent confidence interval - upper         0.117       0.087
##   P-value RMSEA <= 0.05                          0.000       0.000
##
##   Robust RMSEA                                                  NA
##   90 Percent confidence interval - lower                        NA
##   90 Percent confidence interval - upper                        NA
##
## Standardized Root Mean Square Residual:
##
##   SRMR                                           0.196       0.196
##
## Parameter Estimates:
##
##   Standard errors                           Robust.sem
##   Information                                 Expected
##   Information saturated (h1) model        Unstructured
##
## Latent Variables:
##                      Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   metaphysical =~
##     IVI_1               0.695    0.051   13.578    0.000    0.695    0.695
##     IVI_3               0.700    0.042   16.600    0.000    0.700    0.700
##     IVI_4               0.674    0.042   16.065    0.000    0.674    0.674
##     IVI_5               0.624    0.045   13.761    0.000    0.624    0.624
##     IVI_6               0.684    0.044   15.420    0.000    0.684    0.684
##     IVI_8               0.880    0.030   29.431    0.000    0.880    0.880
##     IVI_13              0.679    0.035   19.496    0.000    0.679    0.679
##     IVI_14              0.841    0.040   21.206    0.000    0.841    0.841
##     IVI_15              0.733    0.041   17.831    0.000    0.733    0.733
##     IVI_16              0.499    0.063    7.956    0.000    0.499    0.499
##     IVI_17              0.690    0.044   15.697    0.000    0.690    0.690
##     IVI_25              0.740    0.046   16.197    0.000    0.740    0.740
##     IVI_26              0.824    0.053   15.461    0.000    0.824    0.824
##   positive =~
##     IVI_2               0.693    0.040   17.126    0.000    0.693    0.693
##     IVI_7               0.823    0.031   26.745    0.000    0.823    0.823
##     IVI_9               0.961    0.024   39.307    0.000    0.961    0.961
##     IVI_18              0.822    0.030   27.420    0.000    0.822    0.822
##     IVI_19              0.781    0.032   24.458    0.000    0.781    0.781
##     IVI_20              0.655    0.041   15.873    0.000    0.655    0.655
##     IVI_21              0.656    0.078    8.405    0.000    0.656    0.656
##     IVI_24              0.816    0.033   24.802    0.000    0.816    0.816
##   loss_of_control =~
```

```
##     IVI_10              0.877    0.020   44.815    0.000    0.877    0.877
##     IVI_11              0.861    0.025   34.199    0.000    0.861    0.861
##     IVI_12              0.889    0.023   39.022    0.000    0.889    0.889
##     IVI_22              0.817    0.035   23.530    0.000    0.817    0.817
##     IVI_23              0.843    0.028   29.974    0.000    0.843    0.843
##
## Covariances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   metaphysical ~~
##     positive          0.757    0.029   25.893    0.000    0.757    0.757
##     loss_of_contrl    0.599    0.034   17.743    0.000    0.599    0.599
##   positive ~~
##     loss_of_contrl    0.030    0.058    0.522    0.602    0.030    0.030
##
## Intercepts:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .IVI_1             0.000                               0.000    0.000
##    .IVI_3             0.000                               0.000    0.000
##    .IVI_4             0.000                               0.000    0.000
##    .IVI_5             0.000                               0.000    0.000
##    .IVI_6             0.000                               0.000    0.000
##    .IVI_8             0.000                               0.000    0.000
##    .IVI_13            0.000                               0.000    0.000
##    .IVI_14            0.000                               0.000    0.000
##    .IVI_15            0.000                               0.000    0.000
##    .IVI_16            0.000                               0.000    0.000
##    .IVI_17            0.000                               0.000    0.000
##    .IVI_25            0.000                               0.000    0.000
##    .IVI_26            0.000                               0.000    0.000
##    .IVI_2             0.000                               0.000    0.000
##    .IVI_7             0.000                               0.000    0.000
##    .IVI_9             0.000                               0.000    0.000
##    .IVI_18            0.000                               0.000    0.000
##    .IVI_19            0.000                               0.000    0.000
##    .IVI_20            0.000                               0.000    0.000
##    .IVI_21            0.000                               0.000    0.000
##    .IVI_24            0.000                               0.000    0.000
##    .IVI_10            0.000                               0.000    0.000
##    .IVI_11            0.000                               0.000    0.000
##    .IVI_12            0.000                               0.000    0.000
##    .IVI_22            0.000                               0.000    0.000
##    .IVI_23            0.000                               0.000    0.000
##     metaphysical      0.000                               0.000    0.000
##     positive          0.000                               0.000    0.000
##     loss_of_contrl    0.000                               0.000    0.000
##
## Thresholds:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     IVI_1|t1          1.683    0.104   16.132    0.000    1.683    1.683
##     IVI_1|t2          1.994    0.132   15.084    0.000    1.994    1.994
##     IVI_1|t3          2.832    0.320    8.860    0.000    2.832    2.832
##     IVI_3|t1          0.906    0.070   12.904    0.000    0.906    0.906
##     IVI_3|t2          1.464    0.091   16.124    0.000    1.464    1.464
##     IVI_3|t3          2.086    0.143   14.575    0.000    2.086    2.086
```

```
##      IVI_4|t1          1.326    0.084   15.761    0.000    1.326    1.326
##      IVI_4|t2          1.916    0.124   15.450    0.000    1.916    1.916
##      IVI_4|t3          2.603    0.242   10.751    0.000    2.603    2.603
##      IVI_5|t1          1.108    0.076   14.601    0.000    1.108    1.108
##      IVI_5|t2          1.660    0.103   16.163    0.000    1.660    1.660
##      IVI_5|t3          2.201    0.159   13.845    0.000    2.201    2.201
##      IVI_6|t1          1.198    0.079   15.166    0.000    1.198    1.198
##      IVI_6|t2          1.880    0.121   15.594    0.000    1.880    1.880
##      IVI_6|t3          2.603    0.242   10.751    0.000    2.603    2.603
##      IVI_8|t1          1.119    0.076   14.675    0.000    1.119    1.119
##      IVI_8|t2          1.683    0.104   16.132    0.000    1.683    1.683
##      IVI_8|t3          2.272    0.170   13.352    0.000    2.272    2.272
##      IVI_13|t1         0.578    0.064    9.011    0.000    0.578    0.578
##      IVI_13|t2         1.198    0.079   15.166    0.000    1.198    1.198
##      IVI_13|t3         1.733    0.108   16.042    0.000    1.733    1.733
##      IVI_14|t1         1.707    0.106   16.092    0.000    1.707    1.707
##      IVI_14|t2         2.461    0.207   11.908    0.000    2.461    2.461
##      IVI_14|t3         2.603    0.242   10.751    0.000    2.603    2.603
##      IVI_15|t1         1.186    0.079   15.099    0.000    1.186    1.186
##      IVI_15|t2         1.787    0.112   15.907    0.000    1.787    1.787
##      IVI_15|t3         2.201    0.159   13.845    0.000    2.201    2.201
##      IVI_16|t1         1.247    0.081   15.422    0.000    1.247    1.247
##      IVI_16|t2         1.916    0.124   15.450    0.000    1.916    1.916
##      IVI_16|t3         2.356    0.185   12.729    0.000    2.356    2.356
##      IVI_17|t1         1.415    0.088   16.028    0.000    1.415    1.415
##      IVI_17|t2         2.201    0.159   13.845    0.000    2.201    2.201
##      IVI_17|t3         2.832    0.320    8.860    0.000    2.832    2.832
##      IVI_25|t1         1.299    0.083   15.655    0.000    1.299    1.299
##      IVI_25|t2         1.916    0.124   15.450    0.000    1.916    1.916
##      IVI_25|t3         2.461    0.207   11.908    0.000    2.461    2.461
##      IVI_26|t1         1.817    0.115   15.819    0.000    1.817    1.817
##      IVI_26|t2         2.461    0.207   11.908    0.000    2.461    2.461
##      IVI_26|t3         2.603    0.242   10.751    0.000    2.603    2.603
##      IVI_2|t1          0.906    0.070   12.904    0.000    0.906    0.906
##      IVI_2|t2          1.637    0.101   16.185    0.000    1.637    1.637
##      IVI_2|t3          2.140    0.150   14.245    0.000    2.140    2.140
##      IVI_7|t1          0.830    0.068   12.120    0.000    0.830    0.830
##      IVI_7|t2          1.431    0.089   16.063    0.000    1.431    1.431
##      IVI_7|t3          2.086    0.143   14.575    0.000    2.086    2.086
##      IVI_9|t1          1.119    0.076   14.675    0.000    1.119    1.119
##      IVI_9|t2          1.817    0.115   15.819    0.000    1.817    1.817
##      IVI_9|t3          2.356    0.185   12.729    0.000    2.356    2.356
##      IVI_18|t1         0.978    0.072   13.577    0.000    0.978    0.978
##      IVI_18|t2         1.574    0.097   16.212    0.000    1.574    1.574
##      IVI_18|t3         2.201    0.159   13.845    0.000    2.201    2.201
##      IVI_19|t1         0.822    0.068   12.031    0.000    0.822    0.822
##      IVI_19|t2         1.615    0.100   16.201    0.000    1.615    1.615
##      IVI_19|t3         2.272    0.170   13.352    0.000    2.272    2.272
##      IVI_20|t1         0.774    0.067   11.495    0.000    0.774    0.774
##      IVI_20|t2         1.574    0.097   16.212    0.000    1.574    1.574
##      IVI_20|t3         2.201    0.159   13.845    0.000    2.201    2.201
##      IVI_21|t1         1.707    0.106   16.092    0.000    1.707    1.707
##      IVI_21|t2         2.461    0.207   11.908    0.000    2.461    2.461
##      IVI_24|t1         1.152    0.077   14.891    0.000    1.152    1.152
```

```
##     IVI_24|t2         1.994    0.132   15.084    0.000    1.994    1.994
##     IVI_24|t3         2.832    0.320    8.860    0.000    2.832    2.832
##     IVI_10|t1        -0.309    0.061   -5.032    0.000   -0.309   -0.309
##     IVI_10|t2         0.433    0.062    6.937    0.000    0.433    0.433
##     IVI_10|t3         1.175    0.078   15.031    0.000    1.175    1.175
##     IVI_11|t1        -0.101    0.060   -1.680    0.093   -0.101   -0.101
##     IVI_11|t2         0.598    0.064    9.291    0.000    0.598    0.598
##     IVI_11|t3         1.326    0.084   15.761    0.000    1.326    1.326
##     IVI_12|t1         0.497    0.063    7.883    0.000    0.497    0.497
##     IVI_12|t2         1.076    0.075   14.374    0.000    1.076    1.076
##     IVI_12|t3         1.637    0.101   16.185    0.000    1.637    1.637
##     IVI_22|t1         0.960    0.072   13.411    0.000    0.960    0.960
##     IVI_22|t2         1.660    0.103   16.163    0.000    1.660    1.660
##     IVI_22|t3         2.356    0.185   12.729    0.000    2.356    2.356
##     IVI_23|t1         0.736    0.067   11.043    0.000    0.736    0.736
##     IVI_23|t2         1.535    0.095   16.201    0.000    1.535    1.535
##     IVI_23|t3         1.994    0.132   15.084    0.000    1.994    1.994
##
## Variances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .IVI_1             0.517                               0.517    0.517
##    .IVI_3             0.510                               0.510    0.510
##    .IVI_4             0.545                               0.545    0.545
##    .IVI_5             0.610                               0.610    0.610
##    .IVI_6             0.533                               0.533    0.533
##    .IVI_8             0.225                               0.225    0.225
##    .IVI_13            0.540                               0.540    0.540
##    .IVI_14            0.293                               0.293    0.293
##    .IVI_15            0.463                               0.463    0.463
##    .IVI_16            0.751                               0.751    0.751
##    .IVI_17            0.523                               0.523    0.523
##    .IVI_25            0.452                               0.452    0.452
##    .IVI_26            0.321                               0.321    0.321
##    .IVI_2             0.520                               0.520    0.520
##    .IVI_7             0.322                               0.322    0.322
##    .IVI_9             0.077                               0.077    0.077
##    .IVI_18            0.324                               0.324    0.324
##    .IVI_19            0.389                               0.389    0.389
##    .IVI_20            0.571                               0.571    0.571
##    .IVI_21            0.570                               0.570    0.570
##    .IVI_24            0.334                               0.334    0.334
##    .IVI_10            0.231                               0.231    0.231
##    .IVI_11            0.258                               0.258    0.258
##    .IVI_12            0.210                               0.210    0.210
##    .IVI_22            0.332                               0.332    0.332
##    .IVI_23            0.290                               0.290    0.290
##     metaphysical      1.000                               1.000    1.000
##     positive          1.000                               1.000    1.000
##     loss_of_contrl    1.000                               1.000    1.000
##
## Scales y*:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     IVI_1             1.000                               1.000    1.000
##     IVI_3             1.000                               1.000    1.000
```

```
##     IVI_4              1.000                                   1.000    1.000
##     IVI_5              1.000                                   1.000    1.000
##     IVI_6              1.000                                   1.000    1.000
##     IVI_8              1.000                                   1.000    1.000
##     IVI_13             1.000                                   1.000    1.000
##     IVI_14             1.000                                   1.000    1.000
##     IVI_15             1.000                                   1.000    1.000
##     IVI_16             1.000                                   1.000    1.000
##     IVI_17             1.000                                   1.000    1.000
##     IVI_25             1.000                                   1.000    1.000
##     IVI_26             1.000                                   1.000    1.000
##     IVI_2              1.000                                   1.000    1.000
##     IVI_7              1.000                                   1.000    1.000
##     IVI_9              1.000                                   1.000    1.000
##     IVI_18             1.000                                   1.000    1.000
##     IVI_19             1.000                                   1.000    1.000
##     IVI_20             1.000                                   1.000    1.000
##     IVI_21             1.000                                   1.000    1.000
##     IVI_24             1.000                                   1.000    1.000
##     IVI_10             1.000                                   1.000    1.000
##     IVI_11             1.000                                   1.000    1.000
##     IVI_12             1.000                                   1.000    1.000
##     IVI_22             1.000                                   1.000    1.000
##     IVI_23             1.000                                   1.000    1.000
```

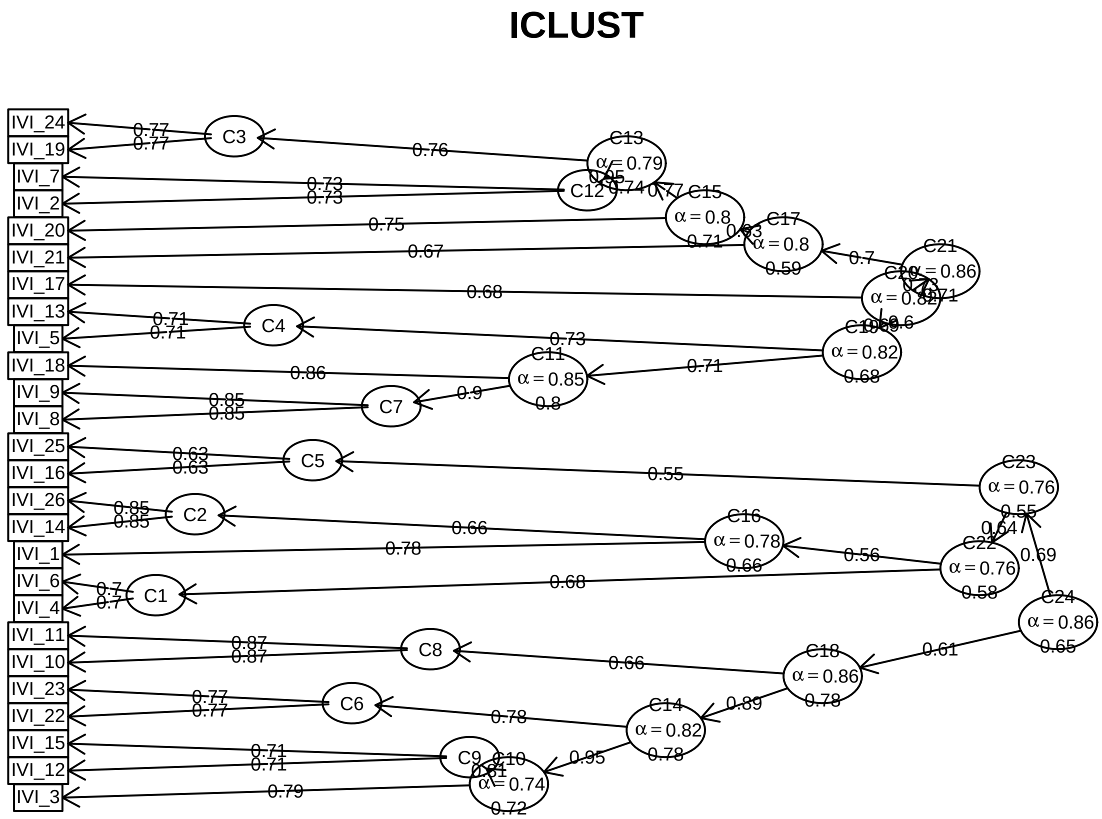
the model was not identified, so the the factor solution was not optimal. Thus we did run an iclust algorithm to find alternative factor model

the iclust plot is kind of hard to read so I saved it in separate .pdf file "iclust_ivi.pdf"

```
##
## Attaching package: 'psych'

## The following object is masked from 'package:semTools':
##
##     skew

## The following object is masked from 'package:lavaan':
##
##     cor2cov
```




```
## ICLUST (Item Cluster Analysis)
## Call: iclust(r.mat = (POLYCHORIC_R(d, method = "Fox", verbose = F)))
##
## Purified Alpha:
##  C24  C21
## 0.86 0.86
##
## G6* reliability:
## C24 C21
##   1   1
##
## Original Beta:
##  C24  C21
## 0.65 0.71
##
## Cluster size:
## C24 C21
##  14  12
##
## Item by Cluster Structure matrix:
##          O   P   C24   C21
## IVI_1  C24 C24  0.48  0.26
## IVI_2  C21 C21  0.11  0.56
## IVI_3  C24 C24  0.57  0.20
## IVI_4  C24 C24  0.43  0.21
## IVI_5  C21 C21  0.15  0.52
```

```
## IVI_6  C24 C24  0.56  0.12
## IVI_7  C21 C21  0.16  0.68
## IVI_8  C21 C21  0.22  0.66
## IVI_9  C21 C21  0.19  0.70
## IVI_10 C24 C24  0.60 -0.04
## IVI_11 C24 C24  0.57 -0.06
## IVI_12 C24 C24  0.71  0.13
## IVI_13 C21 C21  0.22  0.63
## IVI_14 C24 C24  0.58  0.20
## IVI_15 C24 C24  0.64  0.07
## IVI_16 C24 C24  0.38  0.17
## IVI_17 C21 C21  0.32  0.47
## IVI_18 C21 C21  0.17  0.67
## IVI_19 C21 C21  0.00  0.68
## IVI_20 C21 C21  0.17  0.52
## IVI_21 C21 C21  0.06  0.34
## IVI_22 C24 C24  0.63  0.04
## IVI_23 C24 C24  0.64  0.19
## IVI_24 C21 C21  0.05  0.68
## IVI_25 C24 C24  0.54  0.33
## IVI_26 C24 C24  0.55  0.18
##
## With eigenvalues of:
## C24 C21
## 4.6 4.5
##
## Purified scale intercorrelations
##  reliabilities on diagonal
##  correlations corrected for attenuation above diagonal:
##      C24  C21
## C24 0.86 0.27
## C21 0.23 0.86
##
## Cluster fit =  0.72   Pattern fit =  0.93  RMSR =  0.09
```

PQ16 analysis, starting with simple 1-factor model, only with data from 2nd study

```
##        chisq.scaled           df.scaled chisq.scaling.factor
##            2829.371             104.000                0.644
##          cfi.scaled          tli.scaled         rmsea.scaled
##               0.943               0.934                0.062
##                srmr
##               0.052
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##           factor
## alpha  0.9179273
## omega  0.7640425
## omega2 0.7640425
## omega3 0.7699459
## avevar 0.4234952
```

```
##      lhs op  rhs      mi    epc sepc.lv sepc.all sepc.nox
## 196  pq7 ~~ pq14 293.171  0.202   0.202    0.327    0.327
## 120  pq1 ~~  pq7 154.851  0.161   0.161    0.239    0.239
## 205  pq8 ~~ pq15 105.615  0.151   0.151    0.305    0.305
## 126  pq1 ~~ pq13  80.242 -0.169  -0.169   -0.326   -0.326
## 207  pq9 ~~ pq10  69.735  0.108   0.108    0.184    0.184
## 190  pq7 ~~  pq8  64.749 -0.150  -0.150   -0.257   -0.257
## 121  pq1 ~~  pq8  53.966 -0.140  -0.140   -0.250   -0.250
## 204  pq8 ~~ pq14  53.909 -0.127  -0.127   -0.248   -0.248
## 222 pq11 ~~ pq14  53.625  0.090   0.090    0.172    0.172
## 115  pq1 ~~  pq2  52.782  0.097   0.097    0.141    0.141
```

Next, we added covariance between pq7 and pq14

```
##         chisq.scaled           df.scaled chisq.scaling.factor
##             2389.095             103.000                0.640
##           cfi.scaled          tli.scaled         rmsea.scaled
##                0.952               0.944                0.057
##                 srmr
##                0.049
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##           factor
## alpha  0.9179273
## omega  0.7611770
## omega2 0.7611770
## omega3 0.7656690
## avevar 0.4215713
```

```
##      lhs op  rhs      mi    epc sepc.lv sepc.all sepc.nox
## 121  pq1 ~~  pq7 204.665  0.186   0.186    0.268    0.268
## 205  pq8 ~~ pq15  99.978  0.147   0.147    0.299    0.299
## 127  pq1 ~~ pq13  83.139 -0.172  -0.172   -0.334   -0.334
## 222 pq11 ~~ pq14  81.380  0.111   0.111    0.206    0.206
## 207  pq9 ~~ pq10  65.065  0.105   0.105    0.179    0.179
## 194  pq7 ~~ pq11  62.186  0.107   0.107    0.175    0.175
## 128  pq1 ~~ pq14  59.537  0.097   0.097    0.159    0.159
## 122  pq1 ~~  pq8  56.231 -0.143  -0.143   -0.257   -0.257
## 116  pq1 ~~  pq2  50.428  0.095   0.095    0.139    0.139
## 152  pq3 ~~ pq11  46.623 -0.107  -0.107   -0.177   -0.177
```

Comparison between model 1 and 2 of PQ16

```
## [1] "chisq.diff: " "274.242"      "p value: "    "0"
```

and in the next model, we added covariance between pq1 and pq7

```
##         chisq.scaled           df.scaled chisq.scaling.factor
##             2080.415             102.000                0.636
##           cfi.scaled          tli.scaled         rmsea.scaled
```

```
##              0.958               0.951               0.054
##               srmr
##              0.045
```

```
## For constructs with categorical indicators, the alpha and the average variance extracted are calcula
```

```
##          factor
## alpha  0.9179273
## omega  0.7394947
## omega2 0.7394947
## omega3 0.7455761
## avevar 0.4200442
```

Comparison between model 1 and 2 of PQ16

```
## [1] "chisq.diff: " "203.971"      "p value: "    "0"
```

Summary of model 3 PQ16

```
## lavaan 0.6-8 ended normally after 20 iterations
##
##   Estimator                                         DWLS
##   Optimization method                             NLMINB
##   Number of model parameters                          66
##
##   Number of observations                            6772
##
## Model Test User Model:
##                                               Standard      Robust
##   Test Statistic                              1318.434    2080.415
##   Degrees of freedom                               102         102
##   P-value (Chi-square)                           0.000       0.000
##   Scaling correction factor                                  0.636
##   Shift parameter                                            7.445
##        simple second-order correction
##
## Parameter Estimates:
##
##   Standard errors                             Robust.sem
##   Information                                   Expected
##   Information saturated (h1) model          Unstructured
##
## Latent Variables:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##   factor =~
##     pq1               0.576    0.012   48.088    0.000    0.576    0.576
##     pq2               0.527    0.011   46.026    0.000    0.527    0.527
##     pq3               0.537    0.011   46.982    0.000    0.537    0.537
##     pq4               0.639    0.010   65.594    0.000    0.639    0.639
##     pq5               0.672    0.009   73.918    0.000    0.672    0.672
##     pq6               0.702    0.013   53.734    0.000    0.702    0.702
##     pq7               0.480    0.012   40.709    0.000    0.480    0.480
```

```
##     pq8                0.722    0.011   65.120    0.000    0.722    0.722
##     pq9                0.687    0.009   79.137    0.000    0.687    0.687
##     pq10               0.599    0.010   60.401    0.000    0.599    0.599
##     pq11               0.703    0.009   81.329    0.000    0.703    0.703
##     pq12               0.705    0.009   76.241    0.000    0.705    0.705
##     pq13               0.769    0.010   77.273    0.000    0.769    0.769
##     pq14               0.651    0.009   69.788    0.000    0.651    0.651
##     pq15               0.709    0.009   78.872    0.000    0.709    0.709
##     pq16               0.616    0.011   55.173    0.000    0.616    0.616
##
## Covariances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##  .pq7 ~~
##    .pq14               0.218    0.011   20.316    0.000    0.218    0.327
##  .pq1 ~~
##    .pq7                0.185    0.012   15.985    0.000    0.185    0.258
##
## Intercepts:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .pq1                0.000                               0.000    0.000
##    .pq2                0.000                               0.000    0.000
##    .pq3                0.000                               0.000    0.000
##    .pq4                0.000                               0.000    0.000
##    .pq5                0.000                               0.000    0.000
##    .pq6                0.000                               0.000    0.000
##    .pq7                0.000                               0.000    0.000
##    .pq8                0.000                               0.000    0.000
##    .pq9                0.000                               0.000    0.000
##    .pq10               0.000                               0.000    0.000
##    .pq11               0.000                               0.000    0.000
##    .pq12               0.000                               0.000    0.000
##    .pq13               0.000                               0.000    0.000
##    .pq14               0.000                               0.000    0.000
##    .pq15               0.000                               0.000    0.000
##    .pq16               0.000                               0.000    0.000
##     factor             0.000                               0.000    0.000
##
## Thresholds:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     pq1|t1            -1.048    0.019  -56.044    0.000   -1.048   -1.048
##     pq1|t2             0.836    0.017   48.212    0.000    0.836    0.836
##     pq1|t3             2.014    0.034   59.302    0.000    2.014    2.014
##     pq2|t1            -0.884    0.018  -50.226    0.000   -0.884   -0.884
##     pq2|t2             0.808    0.017   47.023    0.000    0.808    0.808
##     pq2|t3             2.074    0.036   57.992    0.000    2.074    2.074
##     pq3|t1             0.130    0.015    8.479    0.000    0.130    0.130
##     pq3|t2             1.298    0.021   61.963    0.000    1.298    1.298
##     pq3|t3             2.142    0.038   56.351    0.000    2.142    2.142
##     pq4|t1             0.082    0.015    5.370    0.000    0.082    0.082
##     pq4|t2             1.376    0.022   63.043    0.000    1.376    1.376
##     pq4|t3             2.273    0.043   52.832    0.000    2.273    2.273
##     pq5|t1             0.063    0.015    4.155    0.000    0.063    0.063
##     pq5|t2             1.453    0.023   63.761    0.000    1.453    1.453
##     pq5|t3             2.342    0.046   50.820    0.000    2.342    2.342
```

```
##     pq6|t1            1.105    0.019   57.712    0.000    1.105    1.105
##     pq6|t2            1.873    0.030   61.856    0.000    1.873    1.873
##     pq6|t3            2.509    0.055   45.614    0.000    2.509    2.509
##     pq7|t1           -0.216    0.015  -14.036    0.000   -0.216   -0.216
##     pq7|t2            0.846    0.017   48.658    0.000    0.846    0.846
##     pq7|t3            1.410    0.022   63.403    0.000    1.410    1.410
##     pq8|t1            0.913    0.018   51.336    0.000    0.913    0.913
##     pq8|t2            1.866    0.030   61.952    0.000    1.866    1.866
##     pq8|t3            2.460    0.052   47.163    0.000    2.460    2.460
##     pq9|t1            0.028    0.015    1.823    0.068    0.028    0.028
##     pq9|t2            1.060    0.019   56.419    0.000    1.060    1.060
##     pq9|t3            1.763    0.028   63.235    0.000    1.763    1.763
##     pq10|t1          -0.037    0.015   -2.430    0.015   -0.037   -0.037
##     pq10|t2           0.972    0.018   53.530    0.000    0.972    0.972
##     pq10|t3           1.759    0.028   63.269    0.000    1.759    1.759
##     pq11|t1           0.124    0.015    8.091    0.000    0.124    0.124
##     pq11|t2           1.209    0.020   60.276    0.000    1.209    1.209
##     pq11|t3           2.058    0.035   58.347    0.000    2.058    2.058
##     pq12|t1           0.444    0.016   28.114    0.000    0.444    0.444
##     pq12|t2           1.505    0.023   64.046    0.000    1.505    1.505
##     pq12|t3           2.244    0.042   53.634    0.000    2.244    2.244
##     pq13|t1           0.913    0.018   51.336    0.000    0.913    0.913
##     pq13|t2           1.795    0.029   62.888    0.000    1.795    1.795
##     pq13|t3           2.397    0.049   49.147    0.000    2.397    2.397
##     pq14|t1          -0.333    0.016  -21.419    0.000   -0.333   -0.333
##     pq14|t2           1.037    0.019   55.704    0.000    1.037    1.037
##     pq14|t3           1.825    0.029   62.516    0.000    1.825    1.825
##     pq15|t1           0.423    0.016   26.865    0.000    0.423    0.423
##     pq15|t2           1.583    0.025   64.182    0.000    1.583    1.583
##     pq15|t3           2.309    0.045   51.800    0.000    2.309    2.309
##     pq16|t1           0.511    0.016   31.967    0.000    0.511    0.511
##     pq16|t2           1.457    0.023   63.791    0.000    1.457    1.457
##     pq16|t3           2.184    0.040   55.264    0.000    2.184    2.184
##
## Variances:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##    .pq1               0.668                               0.668    0.668
##    .pq2               0.722                               0.722    0.722
##    .pq3               0.711                               0.711    0.711
##    .pq4               0.592                               0.592    0.592
##    .pq5               0.548                               0.548    0.548
##    .pq6               0.508                               0.508    0.508
##    .pq7               0.769                               0.769    0.769
##    .pq8               0.479                               0.479    0.479
##    .pq9               0.529                               0.529    0.529
##    .pq10              0.642                               0.642    0.642
##    .pq11              0.506                               0.506    0.506
##    .pq12              0.503                               0.503    0.503
##    .pq13              0.408                               0.408    0.408
##    .pq14              0.576                               0.576    0.576
##    .pq15              0.498                               0.498    0.498
##    .pq16              0.620                               0.620    0.620
##     factor            1.000                               1.000    1.000
##
```

```
## Scales y*:
##                    Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
##     pq1               1.000                               1.000    1.000
##     pq2               1.000                               1.000    1.000
##     pq3               1.000                               1.000    1.000
##     pq4               1.000                               1.000    1.000
##     pq5               1.000                               1.000    1.000
##     pq6               1.000                               1.000    1.000
##     pq7               1.000                               1.000    1.000
##     pq8               1.000                               1.000    1.000
##     pq9               1.000                               1.000    1.000
##     pq10              1.000                               1.000    1.000
##     pq11              1.000                               1.000    1.000
##     pq12              1.000                               1.000    1.000
##     pq13              1.000                               1.000    1.000
##     pq14              1.000                               1.000    1.000
##     pq15              1.000                               1.000    1.000
##     pq16              1.000                               1.000    1.000
```

summary of fit measures for three models of PQ16

```
##        chisq.scaled            df.scaled chisq.scaling.factor
##            2829.371              104.000                0.644
##          cfi.scaled           tli.scaled         rmsea.scaled
##               0.943                0.934                0.062
##                srmr
##               0.052
```

```
##        chisq.scaled            df.scaled chisq.scaling.factor
##            2389.095              103.000                0.640
##          cfi.scaled           tli.scaled         rmsea.scaled
##               0.952                0.944                0.057
##                srmr
##               0.049
```

```
##        chisq.scaled            df.scaled chisq.scaling.factor
##            2080.415              102.000                0.636
##          cfi.scaled           tli.scaled         rmsea.scaled
##               0.958                0.951                0.054
##                srmr
##               0.045
```