

# Who Needs Privacy?

## Analyses

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## Data wrangling

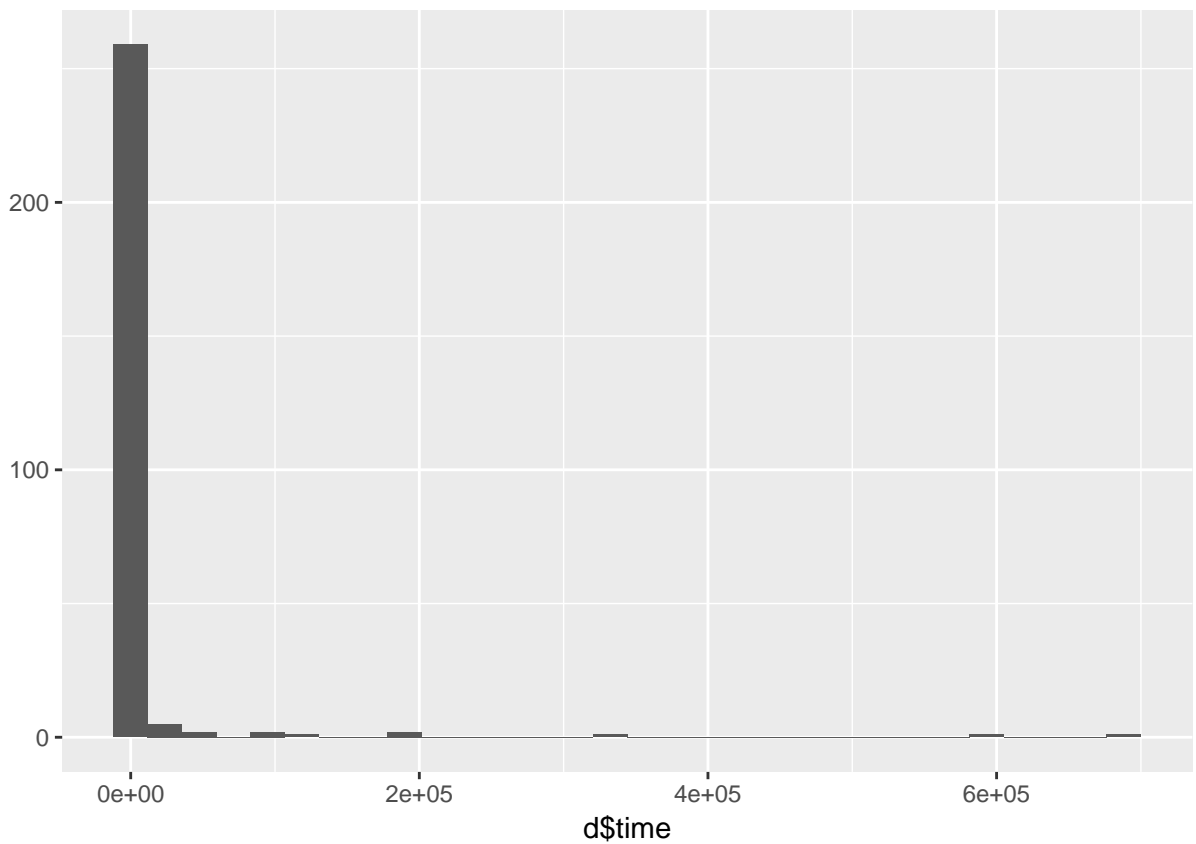
### Filter defective data

#### Empty/missing data

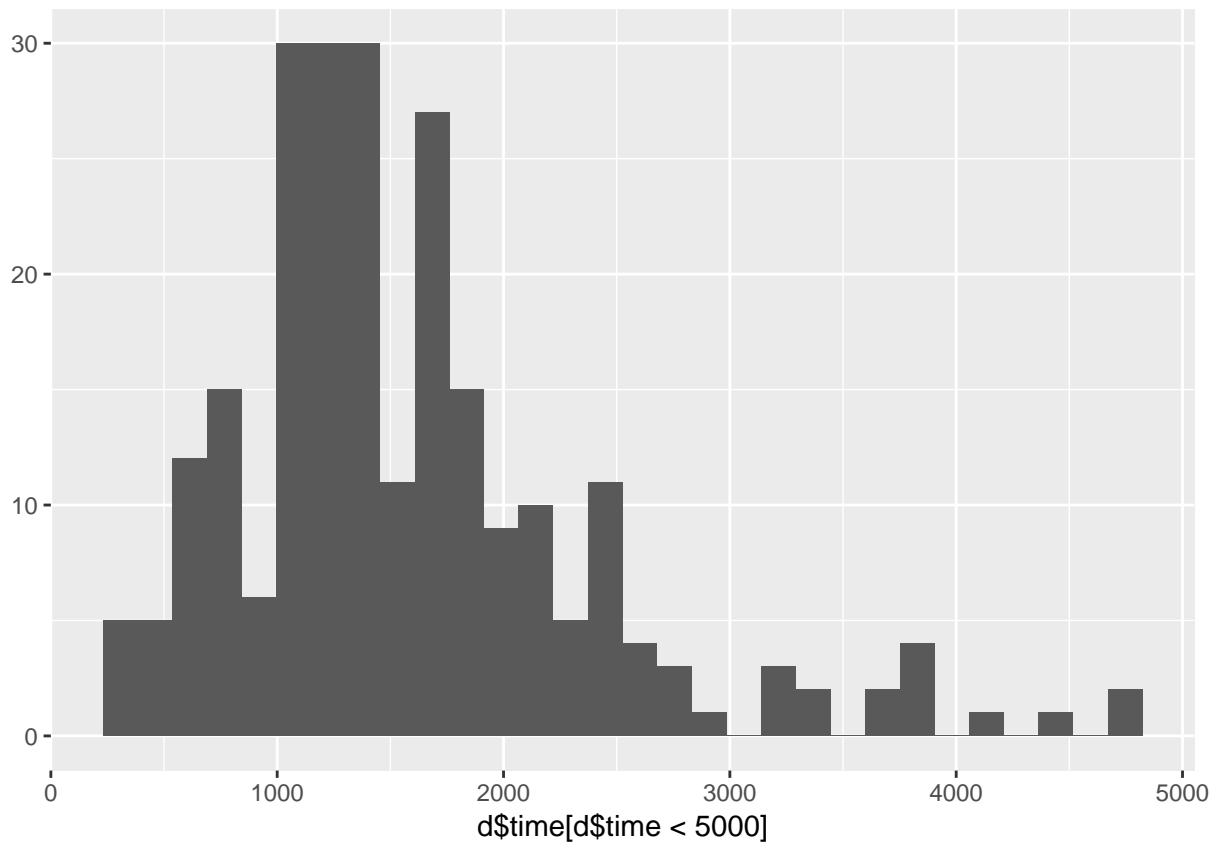
```
##
##      0 0.0125 0.025 0.0375 0.125 0.1625 0.5125 0.675 0.775 0.875 0.975
##    266      4      1      1      1      2      2      1      1      2     15
```

Shows that most people answered all questions. There were 15 empty data sets, and some with more than 50% missing data. These were deleted. Overall, there was just 0.002 missing data.

#### Speeder

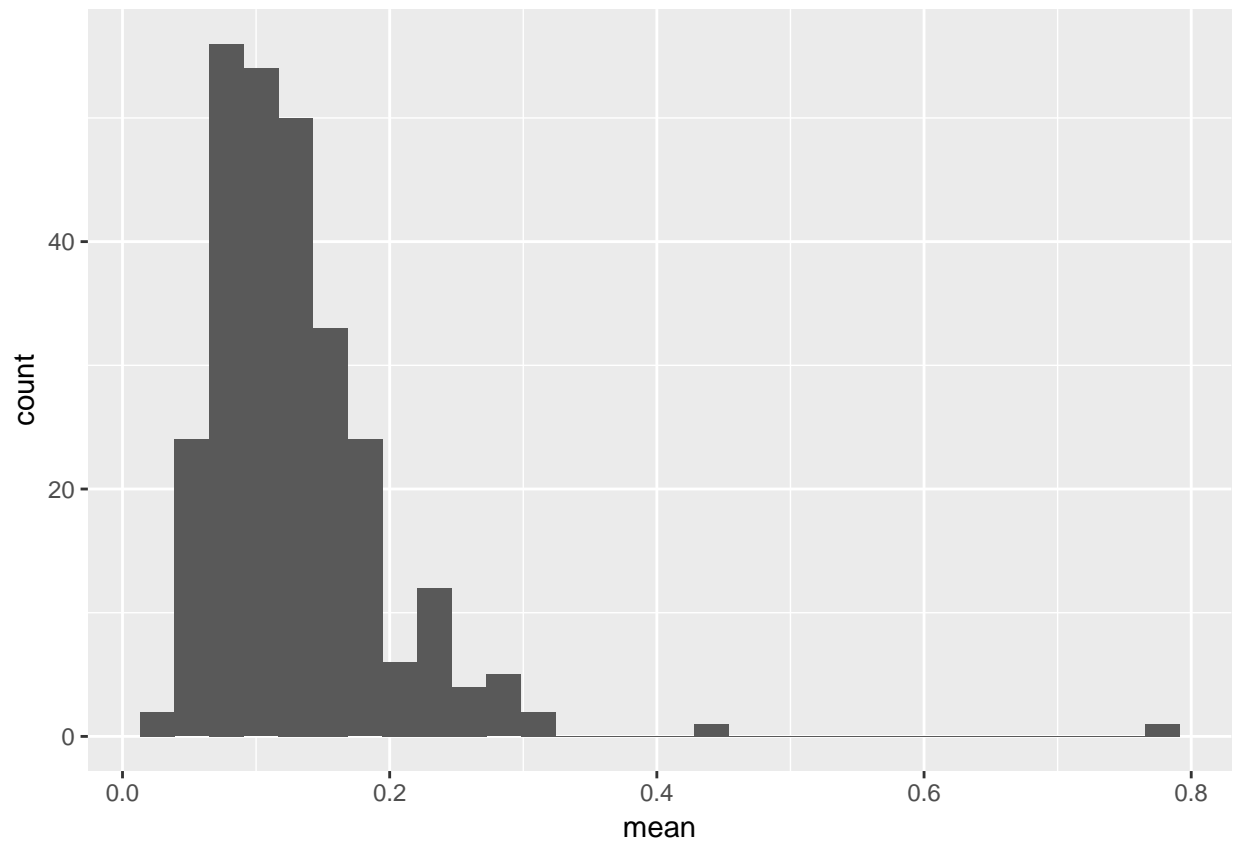


Shows that some participants took very long to answer. Inspect regular times.



Distribution looks okay (no early peak). Also no answers faster than 5 mins.

## Response Styles



Only few participants seem to have particularly atypical data. Will filter respondents with  $m > .30$ . All of the 5% cases indeed show extreme response patterns and/or illogical data. Will be filtered.

## Power Analyses

```
##
##      approximate correlation power calculation (arctangh transformation)
##
##           n = 271
##           r = 0.1
##      sig.level = 0.05
##           power = 0.377
## alternative = two.sided
##
##      approximate correlation power calculation (arctangh transformation)
##
##           n = 271
##           r = 0.216
##      sig.level = 0.05
##           power = 0.95
## alternative = two.sided
```

## Multivariate normal distribution

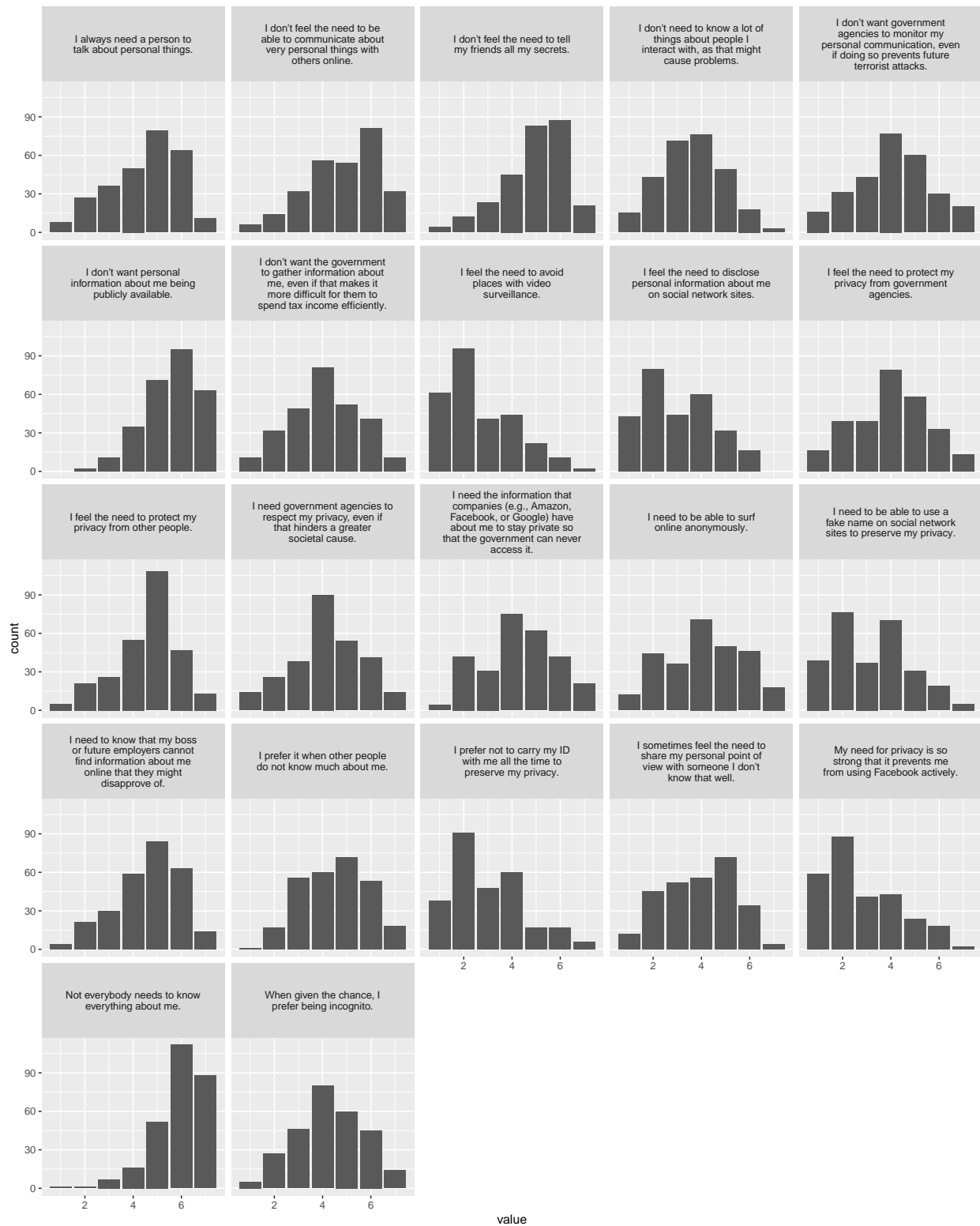
##		Test Statistic	p value	Result
## 1	Mardia Skewness	61271.4	6.1e-238	NO
## 2	Mardia Kurtosis	24.6	0.0e+00	NO



# Measures

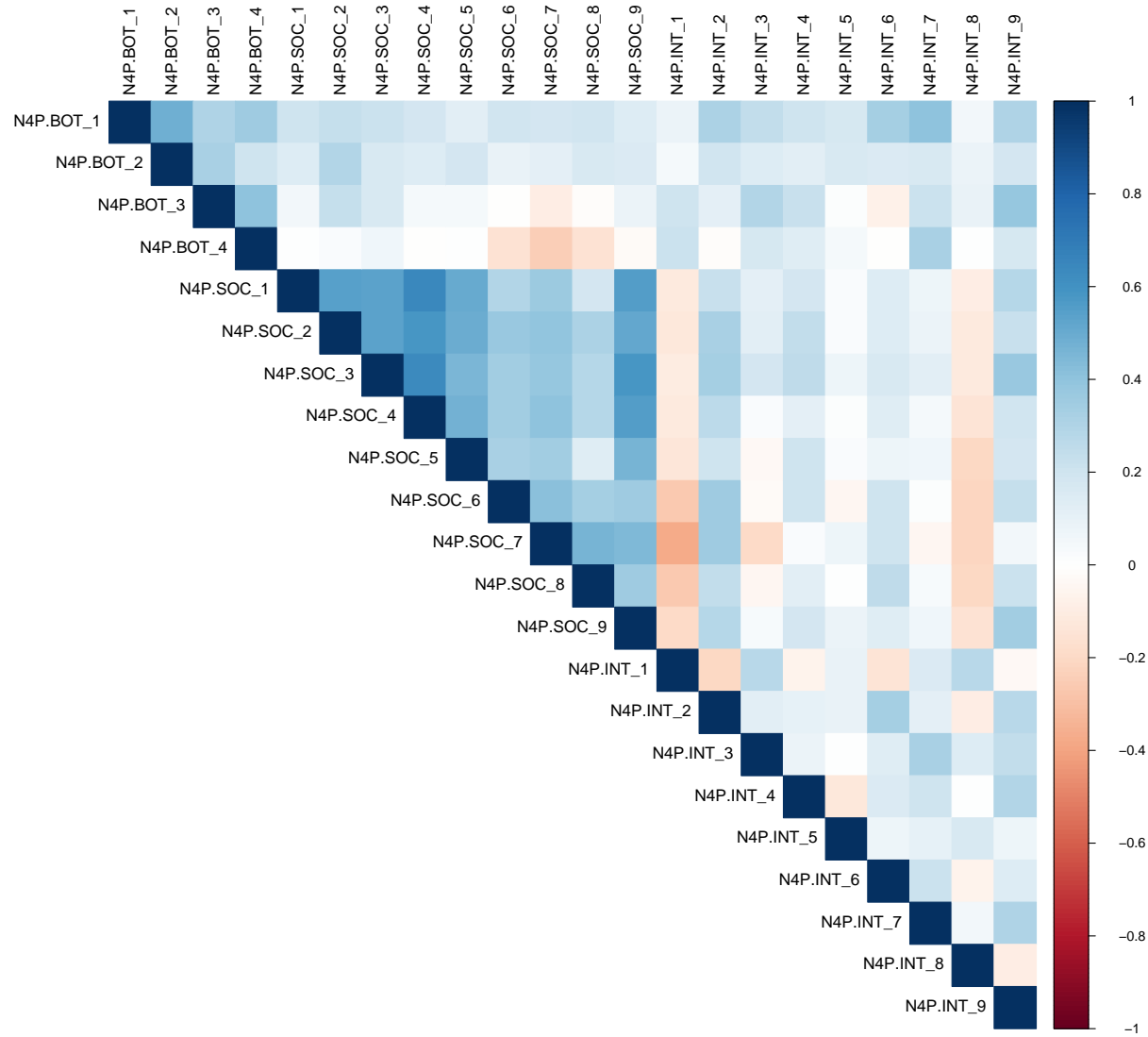
## Need for Privacy

### Items





Correlation table



## Kaiser-Meyer-Olkin criterion

The Kaiser-Meyer-Olkin criterion measures the extent to which items are suitable for being combined as a single factor.

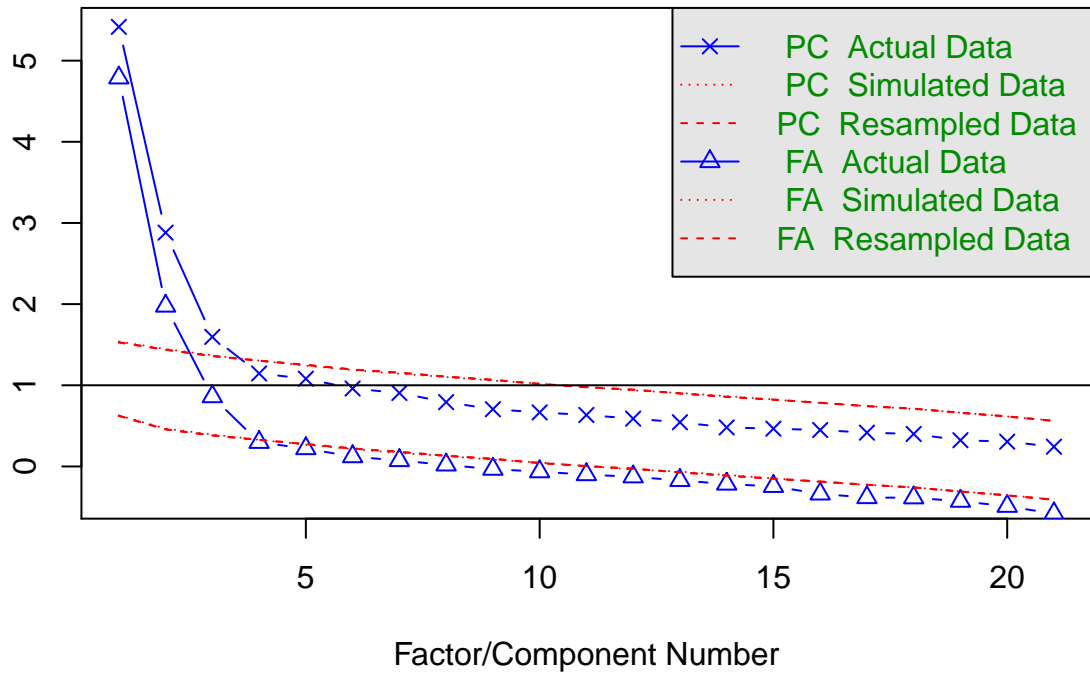
```
## Kaiser-Meyer-Olkin factor adequacy
## Call: KMO(r = d_tmp)
## Overall MSA = 0.84
## MSA for each item =
## N4P.BOT_1 N4P.BOT_2 N4P.BOT_3 N4P.BOT_4 N4P.SOC_1 N4P.SOC_2 N4P.SOC_3 N4P.SOC_4 N4P.SOC_5 N4P.SOC_6
##      0.78      0.79      0.72      0.69      0.87      0.90      0.89      0.86      0.90      0.92
## N4P.SOC_7 N4P.SOC_8 N4P.SOC_9 N4P.INT_1 N4P.INT_2 N4P.INT_3 N4P.INT_4 N4P.INT_5 N4P.INT_6 N4P.INT_7
##      0.83      0.84      0.93      0.82      0.88      0.69      0.77      0.56      0.80      0.80
## N4P.INT_8 N4P.INT_9
##      0.73      0.78
```

On the basis of the KMO, the following items should be excluded: N4P.BOT\_4, N4P.INT\_3, N4P.INT\_5.

## Parallel analysis

eigenvalues of principal components and factor analysis

### Parallel Analysis Scree Plots



## Parallel analysis suggests that the number of factors = 3 and the number of components = 3

## EFA

```
## Factor Analysis using method = minres
## Call: fa(r = d_tmp, nfactors = 3, fm = "oblimin")
## Standardized loadings (pattern matrix) based upon correlation matrix
##           MR1    MR2    MR3    h2    u2    com
## N4P.BOT_1 -0.04  0.77  0.12 0.58 0.42 1.1
## N4P.BOT_2  0.08  0.46  0.01 0.24 0.76 1.1
## N4P.BOT_3  0.16  0.46 -0.35 0.37 0.63 2.1
## N4P.BOT_4  0.03  0.42 -0.38 0.32 0.68 2.0
## N4P.SOC_1  0.78 -0.03 -0.06 0.57 0.43 1.0
## N4P.SOC_2  0.68  0.11  0.05 0.55 0.45 1.1
## N4P.SOC_3  0.73  0.11  0.00 0.59 0.41 1.0
## N4P.SOC_4  0.81 -0.09  0.01 0.63 0.37 1.0
## N4P.SOC_5  0.64 -0.06  0.02 0.40 0.60 1.0
## N4P.SOC_6  0.27  0.12  0.43 0.37 0.63 1.9
## N4P.SOC_7  0.28 -0.01  0.60 0.57 0.43 1.4
## N4P.SOC_8  0.11  0.17  0.51 0.35 0.65 1.3
## N4P.SOC_9  0.69  0.00  0.12 0.55 0.45 1.1
## N4P.INT_1 -0.01  0.13 -0.56 0.34 0.66 1.1
## N4P.INT_2  0.11  0.35  0.38 0.33 0.67 2.2
## N4P.INT_3  0.08  0.40 -0.29 0.26 0.74 1.9
## N4P.INT_4  0.19  0.27 -0.02 0.14 0.86 1.8
## N4P.INT_6 -0.11  0.40  0.39 0.26 0.74 2.1
## N4P.INT_7 -0.02  0.55 -0.12 0.31 0.69 1.1
## N4P.INT_8 -0.12  0.09 -0.27 0.11 0.89 1.6
## N4P.INT_9  0.25  0.43 -0.03 0.31 0.69 1.6
##
##           MR1    MR2    MR3
## SS loadings          3.74 2.40 2.02
## Proportion Var       0.18 0.11 0.10
## Cumulative Var       0.18 0.29 0.39
## Proportion Explained 0.46 0.29 0.25
## Cumulative Proportion 0.46 0.75 1.00
##
## With factor correlations of
##           MR1    MR2    MR3
## MR1 1.00  0.31  0.37
## MR2 0.31  1.00 -0.01
## MR3 0.37 -0.01  1.00
##
## Mean item complexity = 1.5
## Test of the hypothesis that 3 factors are sufficient.
##
## The degrees of freedom for the null model are 210 and the objective function was 7.11 with Chi Sq
## The degrees of freedom for the model are 150 and the objective function was 1.12
##
## The root mean square of the residuals (RMSR) is 0.05
## The df corrected root mean square of the residuals is 0.05
##
## The harmonic number of observations is 271 with the empirical chi square 232 with prob < 1.9e-05
## The total number of observations was 271 with Likelihood Chi Square = 292 with prob < 3.3e-11
##
## Tucker Lewis Index of factoring reliability = 0.879
```

```

## RMSEA index = 0.061 and the 90 % confidence intervals are 0.049 0.069
## BIC = -548
## Fit based upon off diagonal values = 0.97
## Measures of factor score adequacy
##
## Correlation of (regression) scores with factors    MR1  MR2  MR3
## Multiple R square of scores with factors          0.94 0.90 0.88
## Minimum correlation of possible factor scores      0.89 0.80 0.77
## Minimum correlation of possible factor scores      0.78 0.61 0.54

```

Three latent factors emerge:

- factor 1 measures need for privacy from the government (vertical)
- factor 2 measures need for privacy from other people (horizontal)
- factor 3 can be described as desire for anonymity (combined)

The following items overall contribute little:

- Communalities reveal that item INT\_4 and INT\_8 don't load sufficiently strong on latent factors. Should be excluded.
- Item INT\_1 only loads negative on factor 3 – little positive contribution

The following items show double-loadings:

- BOT\_3, BOT\_4, INT\_2, INT\_6. Will be difficult to decide whether to maintain or delete.

```

## Factor Analysis using method = minres
## Call: fa(r = d_tmp, nfactors = 3, fm = "oblimin")
## Standardized loadings (pattern matrix) based upon correlation matrix
##           MR1    MR2    MR3    h2    u2 com
## N4P.BOT_1 -0.04  0.78  0.13  0.60  0.40  1.1
## N4P.BOT_2  0.09  0.46  0.01  0.25  0.75  1.1
## N4P.BOT_3  0.16  0.45 -0.38  0.38  0.62  2.2
## N4P.BOT_4  0.03  0.43 -0.45  0.39  0.61  2.0
## N4P.SOC_1  0.78 -0.04 -0.05  0.57  0.43  1.0
## N4P.SOC_2  0.69  0.11  0.04  0.55  0.45  1.1
## N4P.SOC_3  0.74  0.10 -0.01  0.59  0.41  1.0
## N4P.SOC_4  0.81 -0.08  0.02  0.63  0.37  1.0
## N4P.SOC_5  0.65 -0.06  0.00  0.40  0.60  1.0
## N4P.SOC_6  0.30  0.11  0.39  0.35  0.65  2.0
## N4P.SOC_7  0.32  0.00  0.59  0.58  0.42  1.5
## N4P.SOC_8  0.14  0.17  0.48  0.34  0.66  1.5
## N4P.SOC_9  0.71 -0.01  0.09  0.56  0.44  1.0
## N4P.INT_2  0.14  0.36  0.35  0.33  0.67  2.3
## N4P.INT_3  0.06  0.40 -0.24  0.23  0.77  1.7
## N4P.INT_6 -0.09  0.40  0.39  0.27  0.73  2.1
## N4P.INT_7 -0.03  0.54 -0.12  0.30  0.70  1.1
## N4P.INT_9  0.28  0.41 -0.09  0.31  0.69  1.9
##
##           MR1    MR2    MR3
## SS loadings          3.75  2.28  1.58
## Proportion Var        0.21  0.13  0.09
## Cumulative Var        0.21  0.34  0.42
## Proportion Explained  0.49  0.30  0.21
## Cumulative Proportion 0.49  0.79  1.00
##
## With factor correlations of
##           MR1    MR2    MR3
## MR1 1.00  0.31  0.33
## MR2 0.31  1.00 -0.01
## MR3 0.33 -0.01  1.00
##
## Mean item complexity = 1.5
## Test of the hypothesis that 3 factors are sufficient.
##
## The degrees of freedom for the null model are 153 and the objective function was 6.36 with Chi Sq
## The degrees of freedom for the model are 102 and the objective function was 0.84
##
## The root mean square of the residuals (RMSR) is 0.04
## The df corrected root mean square of the residuals is 0.05
##
## The harmonic number of observations is 271 with the empirical chi square 158 with prob < 0.00034
## The total number of observations was 271 with Likelihood Chi Square = 220 with prob < 1.1e-10
##
## Tucker Lewis Index of factoring reliability = 0.882
## RMSEA index = 0.068 and the 90 % confidence intervals are 0.054 0.077
## BIC = -351
## Fit based upon off diagonal values = 0.98
## Measures of factor score adequacy
##
##           MR1 MR2 MR3

```

## Correlation of (regression) scores with factors	0.94	0.9	0.85
## Multiple R square of scores with factors	0.89	0.8	0.73
## Minimum correlation of possible factor scores	0.78	0.6	0.46

## CFA 1

```

## lavaan 0.6-3 ended normally after 39 iterations
##
## Optimization method          NLMINB
## Number of free parameters    41
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     365.551  321.384
## Degrees of freedom           130      130
## P-value (Chi-square)         0.000    0.000
## Scaling correction factor     1.137
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 1724.025 1532.704
## Degrees of freedom             153      153
## P-value                        0.000    0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      0.850    0.861
## Tucker-Lewis Index (TLI)        0.824    0.837
##
## Robust Comparative Fit Index (CFI)      0.860
## Robust Tucker-Lewis Index (TLI)        0.835
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)      -7849.114 -7849.114
## Loglikelihood unrestricted model (H1) -7666.338 -7666.338
##
## Number of free parameters          41      41
## Akaike (AIC)                      15780.227 15780.227
## Bayesian (BIC)                    15927.914 15927.914
## Sample-size adjusted Bayesian (BIC) 15797.915 15797.915
##
## Root Mean Square Error of Approximation:
##
## RMSEA                            0.082    0.074
## 90 Percent Confidence Interval    0.072 0.092    0.064 0.083
## P-value RMSEA <= 0.05            0.000    0.000
##
## Robust RMSEA                      0.079
## 90 Percent Confidence Interval    0.068 0.089
##
## Standardized Root Mean Square Residual:
##
## SRMR                            0.083    0.083
##
## Parameter Estimates:

```



```

##
## Information
## Information saturated (h1) model Expected
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov =~
## N4P.SOC_1 1.000 1.092 0.750
## N4P.SOC_2 0.998 0.091 11.006 0.000 1.090 0.732
## N4P.SOC_3 1.006 0.085 11.827 0.000 1.098 0.762
## N4P.SOC_4 1.128 0.083 13.577 0.000 1.232 0.801
## N4P.SOC_5 0.906 0.089 10.191 0.000 0.990 0.623
## N4P.SOC_9 1.015 0.088 11.474 0.000 1.108 0.734
## pri_nee_int =~
## N4P.BOT_1 1.000 0.948 0.711
## N4P.BOT_2 0.752 0.105 7.185 0.000 0.713 0.517
## N4P.BOT_3 0.640 0.078 8.219 0.000 0.607 0.538
## N4P.BOT_4 0.540 0.080 6.709 0.000 0.512 0.486
## N4P.INT_2 0.455 0.127 3.583 0.000 0.431 0.283
## N4P.INT_3 0.667 0.105 6.344 0.000 0.633 0.435
## N4P.INT_6 0.349 0.103 3.403 0.001 0.331 0.253
## N4P.INT_7 0.727 0.092 7.937 0.000 0.689 0.539
## N4P.INT_9 0.696 0.088 7.892 0.000 0.659 0.513
## pri_nee_ano =~
## N4P.SOC_6 1.000 0.913 0.599
## N4P.SOC_7 1.166 0.143 8.156 0.000 1.065 0.762
## N4P.SOC_8 0.919 0.124 7.386 0.000 0.839 0.569
## N4P.INT_2 0.771 0.123 6.287 0.000 0.703 0.461
## N4P.INT_6 0.412 0.096 4.309 0.000 0.376 0.288
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov ~~
## pri_nee_int 0.333 0.084 3.956 0.000 0.322 0.322
## pri_nee_ano 0.671 0.103 6.517 0.000 0.673 0.673
## pri_nee_int ~~
## pri_nee_ano 0.095 0.072 1.309 0.190 0.109 0.109
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.SOC_1 0.929 0.094 9.901 0.000 0.929 0.438
## .N4P.SOC_2 1.029 0.144 7.160 0.000 1.029 0.464
## .N4P.SOC_3 0.869 0.121 7.164 0.000 0.869 0.419
## .N4P.SOC_4 0.849 0.111 7.671 0.000 0.849 0.359
## .N4P.SOC_5 1.540 0.152 10.124 0.000 1.540 0.611
## .N4P.SOC_9 1.052 0.110 9.582 0.000 1.052 0.461
## .N4P.BOT_1 0.879 0.113 7.806 0.000 0.879 0.495
## .N4P.BOT_2 1.394 0.141 9.911 0.000 1.394 0.733
## .N4P.BOT_3 0.905 0.090 10.042 0.000 0.905 0.711
## .N4P.BOT_4 0.848 0.102 8.347 0.000 0.848 0.764
## .N4P.INT_2 1.578 0.149 10.609 0.000 1.578 0.679
## .N4P.INT_3 1.715 0.148 11.613 0.000 1.715 0.811
## .N4P.INT_6 1.428 0.122 11.662 0.000 1.428 0.837

```

##	.N4P.INT_7	1.159	0.125	9.304	0.000	1.159	0.709
##	.N4P.INT_9	1.217	0.137	8.907	0.000	1.217	0.737
##	.N4P.SOC_6	1.490	0.169	8.794	0.000	1.490	0.641
##	.N4P.SOC_7	0.818	0.127	6.440	0.000	0.818	0.419
##	.N4P.SOC_8	1.469	0.179	8.213	0.000	1.469	0.676
##	pri_nee_gov	1.192	0.171	6.955	0.000	1.000	1.000
##	pri_nee_int	0.898	0.136	6.617	0.000	1.000	1.000
##	pri_nee_ano	0.833	0.174	4.780	0.000	1.000	1.000

Does not yield good results. Inspect modification indices.

##		lhs	op	rhs	mi	epc	sepc.lv	sepc.all	sepc.nox
## 75	pri_nee_ano	=~		N4P.BOT_4	34.2	-0.436	-0.398	-0.377	-0.377
## 72	pri_nee_ano	=~		N4P.BOT_1	21.1	0.406	0.371	0.278	0.278
## 190	N4P.BOT_3	~~		N4P.INT_6	20.4	-0.341	-0.341	-0.300	-0.300
## 166	N4P.BOT_1	~~		N4P.BOT_2	20.3	0.420	0.420	0.380	0.380
## 53	pri_nee_gov	=~		N4P.INT_9	16.9	0.308	0.336	0.262	0.262
## 215	N4P.INT_3	~~		N4P.SOC_7	15.2	-0.349	-0.349	-0.295	-0.295
## 187	N4P.BOT_3	~~		N4P.BOT_4	13.6	0.225	0.225	0.257	0.257
## 162	N4P.SOC_9	~~		N4P.INT_9	11.7	0.262	0.262	0.232	0.232
## 78	pri_nee_ano	=~		N4P.INT_9	11.1	0.301	0.274	0.214	0.214
## 48	pri_nee_gov	=~		N4P.BOT_4	10.8	-0.204	-0.223	-0.211	-0.211
## 102	N4P.SOC_2	~~		N4P.BOT_3	10.4	0.213	0.213	0.220	0.220
## 167	N4P.BOT_1	~~		N4P.BOT_3	10.2	-0.244	-0.244	-0.274	-0.274
## 175	N4P.BOT_1	~~		N4P.SOC_7	10.1	0.230	0.230	0.272	0.272

As expected, items BOT\_2, BOT\_3, & BOT\_4 cause trouble. Will delete.

## CFA 2

```
## lavaan 0.6-3 ended normally after 37 iterations
##
## Optimization method NLMINB
## Number of free parameters 35
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 196.044 166.304
## Degrees of freedom 85 85
## P-value (Chi-square) 0.000 0.000
## Scaling correction factor 1.179
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 1400.662 1212.732
## Degrees of freedom 105 105
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.914 0.927
## Tucker-Lewis Index (TLI) 0.894 0.909
##
## Robust Comparative Fit Index (CFI) 0.925
## Robust Tucker-Lewis Index (TLI) 0.907
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -6638.533 -6638.533
## Loglikelihood unrestricted model (H1) -6540.511 -6540.511
##
## Number of free parameters 35 35
## Akaike (AIC) 13347.067 13347.067
## Bayesian (BIC) 13473.141 13473.141
## Sample-size adjusted Bayesian (BIC) 13362.166 13362.166
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.069 0.059
## 90 Percent Confidence Interval 0.057 0.082 0.047 0.072
## P-value RMSEA <= 0.05 0.007 0.103
##
## Robust RMSEA 0.065
## 90 Percent Confidence Interval 0.050 0.079
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.070 0.070
##
## Parameter Estimates:
```

```

##
## Information
## Information saturated (h1) model Expected
## Standard Errors Structured
## Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov =~
## N4P.SOC_1 1.000 1.094 0.751
## N4P.SOC_2 0.992 0.091 10.923 0.000 1.085 0.729
## N4P.SOC_3 1.003 0.085 11.780 0.000 1.097 0.762
## N4P.SOC_4 1.128 0.083 13.551 0.000 1.234 0.802
## N4P.SOC_5 0.904 0.089 10.179 0.000 0.989 0.623
## N4P.SOC_9 1.014 0.088 11.494 0.000 1.109 0.735
## pri_nee_int =~
## N4P.BOT_1 1.000 0.885 0.664
## N4P.INT_2 0.540 0.147 3.674 0.000 0.478 0.313
## N4P.INT_3 0.733 0.145 5.065 0.000 0.649 0.446
## N4P.INT_6 0.526 0.132 3.995 0.000 0.465 0.356
## N4P.INT_7 0.842 0.141 5.976 0.000 0.745 0.583
## N4P.INT_9 0.757 0.129 5.847 0.000 0.669 0.521
## pri_nee_ano =~
## N4P.SOC_6 1.000 0.914 0.599
## N4P.SOC_7 1.162 0.145 8.019 0.000 1.061 0.760
## N4P.SOC_8 0.923 0.125 7.362 0.000 0.843 0.572
## N4P.INT_2 0.711 0.129 5.527 0.000 0.650 0.426
## N4P.INT_6 0.334 0.099 3.370 0.001 0.305 0.234
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov ~~
## pri_nee_int 0.331 0.087 3.800 0.000 0.342 0.342
## pri_nee_ano 0.676 0.104 6.493 0.000 0.676 0.676
## pri_nee_int ~~
## pri_nee_ano 0.164 0.075 2.186 0.029 0.203 0.203
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.SOC_1 0.925 0.094 9.825 0.000 0.925 0.436
## .N4P.SOC_2 1.038 0.145 7.173 0.000 1.038 0.468
## .N4P.SOC_3 0.870 0.122 7.130 0.000 0.870 0.420
## .N4P.SOC_4 0.843 0.111 7.610 0.000 0.843 0.356
## .N4P.SOC_5 1.541 0.152 10.140 0.000 1.541 0.612
## .N4P.SOC_9 1.050 0.109 9.592 0.000 1.050 0.460
## .N4P.BOT_1 0.995 0.150 6.646 0.000 0.995 0.560
## .N4P.INT_2 1.549 0.149 10.402 0.000 1.549 0.666
## .N4P.INT_3 1.694 0.143 11.840 0.000 1.694 0.801
## .N4P.INT_6 1.339 0.126 10.591 0.000 1.339 0.785
## .N4P.INT_7 1.079 0.129 8.376 0.000 1.079 0.660
## .N4P.INT_9 1.203 0.149 8.081 0.000 1.203 0.729
## .N4P.SOC_6 1.488 0.170 8.743 0.000 1.488 0.641
## .N4P.SOC_7 0.825 0.129 6.376 0.000 0.825 0.423
## .N4P.SOC_8 1.463 0.178 8.225 0.000 1.463 0.673
## pri_nee_gov 1.197 0.172 6.960 0.000 1.000 1.000

```

##	pri_nee_int	0.783	0.163	4.791	0.000	1.000	1.000
##	pri_nee_ano	0.835	0.176	4.738	0.000	1.000	1.000

Shows acceptable fit. Problem is, we don't want to exclude too many items and to overfit the data. Let's inspect modification indices once more to see if there's a theoretically plausible adaption.

##		lhs	op	rhs	mi	epc	sepc.lv	sepc.all	sepc.nox
## 155		N4P.INT_3	~~	N4P.SOC_7	16.7	-0.371	-0.371	-0.314	-0.314
## 44		pri_nee_gov	=~	N4P.INT_9	16.5	0.325	0.355	0.277	0.277
## 64		pri_nee_ano	=~	N4P.INT_3	15.1	-0.435	-0.397	-0.273	-0.273
## 63		pri_nee_ano	=~	N4P.BOT_1	12.3	0.373	0.341	0.256	0.256
## 132		N4P.SOC_9	~~	N4P.INT_9	11.2	0.261	0.261	0.232	0.232
## 65		pri_nee_ano	=~	N4P.INT_7	10.7	-0.322	-0.294	-0.230	-0.230

Item INT\_3 is a troublemaker. As it's an inverted item, we have a good reason to delete it. Also, item INT\_6 doesn't really have anything to do with anonymity; we can delete it. Likewise, item SOC\_5 loads on government, while it also measure anonymity. Maybe delete.

### CFA 3

```
## lavaan 0.6-3 ended normally after 40 iterations
##
## Optimization method NLMINB
## Number of free parameters 28
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 117.092 97.737
## Degrees of freedom 50 50
## P-value (Chi-square) 0.000 0.000
## Scaling correction factor 1.198
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 1123.084 968.042
## Degrees of freedom 66 66
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.937 0.947
## Tucker-Lewis Index (TLI) 0.916 0.930
##
## Robust Comparative Fit Index (CFI) 0.945
## Robust Tucker-Lewis Index (TLI) 0.928
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -5285.176 -5285.176
## Loglikelihood unrestricted model (H1) -5226.630 -5226.630
##
## Number of free parameters 28 28
## Akaike (AIC) 10626.352 10626.352
## Bayesian (BIC) 10727.211 10727.211
## Sample-size adjusted Bayesian (BIC) 10638.431 10638.431
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.070 0.059
## 90 Percent Confidence Interval 0.054 0.087 0.043 0.075
## P-value RMSEA <= 0.05 0.023 0.160
##
## Robust RMSEA 0.065
## 90 Percent Confidence Interval 0.046 0.084
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.062 0.062
##
## Parameter Estimates:
```

```

##
## Information
## Information saturated (h1) model Expected
## Standard Errors Structured
## Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov =~
## N4P.SOC_1 1.000 1.082 0.743
## N4P.SOC_2 0.992 0.091 10.934 0.000 1.074 0.721
## N4P.SOC_3 1.021 0.088 11.575 0.000 1.105 0.767
## N4P.SOC_4 1.150 0.088 13.048 0.000 1.244 0.809
## N4P.SOC_9 1.025 0.089 11.459 0.000 1.109 0.735
## pri_nee_int =~
## N4P.BOT_1 1.000 0.897 0.673
## N4P.INT_2 0.495 0.167 2.963 0.003 0.444 0.291
## N4P.INT_7 0.748 0.138 5.423 0.000 0.671 0.525
## N4P.INT_9 0.790 0.142 5.563 0.000 0.708 0.551
## pri_nee_ano =~
## N4P.SOC_6 1.000 0.919 0.603
## N4P.SOC_7 1.134 0.149 7.633 0.000 1.042 0.746
## N4P.SOC_8 0.921 0.125 7.376 0.000 0.846 0.574
## N4P.INT_2 0.655 0.137 4.772 0.000 0.602 0.395
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov ~~
## pri_nee_int 0.399 0.091 4.361 0.000 0.411 0.411
## pri_nee_ano 0.692 0.105 6.588 0.000 0.696 0.696
## pri_nee_int ~~
## pri_nee_ano 0.260 0.083 3.126 0.002 0.316 0.316
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.SOC_1 0.951 0.099 9.572 0.000 0.951 0.448
## .N4P.SOC_2 1.063 0.145 7.348 0.000 1.063 0.480
## .N4P.SOC_3 0.854 0.119 7.187 0.000 0.854 0.412
## .N4P.SOC_4 0.819 0.118 6.957 0.000 0.819 0.346
## .N4P.SOC_9 1.050 0.109 9.651 0.000 1.050 0.460
## .N4P.BOT_1 0.973 0.169 5.771 0.000 0.973 0.547
## .N4P.INT_2 1.597 0.150 10.656 0.000 1.597 0.687
## .N4P.INT_7 1.183 0.134 8.821 0.000 1.183 0.724
## .N4P.INT_9 1.150 0.155 7.426 0.000 1.150 0.696
## .N4P.SOC_6 1.479 0.173 8.567 0.000 1.479 0.637
## .N4P.SOC_7 0.867 0.132 6.581 0.000 0.867 0.444
## .N4P.SOC_8 1.458 0.176 8.283 0.000 1.458 0.671
## pri_nee_gov 1.171 0.172 6.823 0.000 1.000 1.000
## pri_nee_int 0.805 0.181 4.442 0.000 1.000 1.000
## pri_nee_ano 0.844 0.180 4.676 0.000 1.000 1.000

```

Shows a satisfactory, but not ideal solution. Try bifactor next.

## CFA bifactor

```
## lavaan 0.6-3 ended normally after 81 iterations
##
## Optimization method          NLMINB
## Number of free parameters    37
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     80.583  66.819
## Degrees of freedom           41      41
## P-value (Chi-square)         0.000    0.007
## Scaling correction factor     1.206
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 1123.084  968.042
## Degrees of freedom             66      66
## P-value                       0.000    0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      0.963    0.971
## Tucker-Lewis Index (TLI)        0.940    0.954
##
## Robust Comparative Fit Index (CFI)      0.970
## Robust Tucker-Lewis Index (TLI)        0.952
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)      -5266.921  -5266.921
## Loglikelihood unrestricted model (H1) -5226.630  -5226.630
##
## Number of free parameters          37      37
## Akaike (AIC)                      10607.842  10607.842
## Bayesian (BIC)                     10741.121  10741.121
## Sample-size adjusted Bayesian (BIC)  10623.805  10623.805
##
## Root Mean Square Error of Approximation:
##
## RMSEA                            0.060      0.048
## 90 Percent Confidence Interval    0.040  0.079    0.028  0.067
## P-value RMSEA <= 0.05            0.192      0.540
##
## Robust RMSEA                      0.053
## 90 Percent Confidence Interval    0.028  0.075
##
## Standardized Root Mean Square Residual:
##
## SRMR                            0.040      0.040
##
## Parameter Estimates:
```



```

##
## Information
## Information saturated (h1) model Expected
## Standard Errors Structured
## Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gen =~
## N4P.SOC_1 1.000 0.948 0.651
## N4P.SOC_2 1.062 0.108 9.812 0.000 1.007 0.676
## N4P.SOC_3 1.102 0.111 9.908 0.000 1.046 0.726
## N4P.SOC_4 1.054 0.114 9.245 0.000 1.000 0.650
## N4P.SOC_9 1.214 0.127 9.595 0.000 1.152 0.763
## N4P.BOT_1 0.407 0.104 3.911 0.000 0.386 0.289
## N4P.INT_2 0.680 0.125 5.419 0.000 0.645 0.422
## N4P.INT_7 0.128 0.101 1.273 0.203 0.121 0.095
## N4P.INT_9 0.565 0.103 5.472 0.000 0.536 0.417
## N4P.SOC_6 0.797 0.132 6.051 0.000 0.756 0.496
## N4P.SOC_7 0.799 0.131 6.104 0.000 0.758 0.543
## N4P.SOC_8 0.670 0.130 5.146 0.000 0.635 0.431
## pri_nee_gov =~
## N4P.SOC_1 1.000 0.485 0.333
## N4P.SOC_2 0.670 0.213 3.149 0.002 0.325 0.218
## N4P.SOC_3 0.719 0.216 3.329 0.001 0.349 0.242
## N4P.SOC_4 2.126 1.101 1.930 0.054 1.031 0.670
## N4P.SOC_9 0.301 0.272 1.106 0.269 0.146 0.097
## pri_nee_int =~
## N4P.BOT_1 1.000 0.788 0.591
## N4P.INT_2 0.458 0.173 2.645 0.008 0.361 0.236
## N4P.INT_7 1.030 0.252 4.094 0.000 0.812 0.635
## N4P.INT_9 0.616 0.156 3.949 0.000 0.486 0.378
## pri_nee_ano =~
## N4P.SOC_6 1.000 0.456 0.299
## N4P.SOC_7 1.684 0.719 2.342 0.019 0.768 0.550
## N4P.SOC_8 1.274 0.477 2.671 0.008 0.581 0.394
## N4P.INT_2 0.874 0.357 2.447 0.014 0.399 0.261
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gen ~~
## pri_nee_gov 0.000 0.000 0.000
## pri_nee_int 0.000 0.000 0.000
## pri_nee_ano 0.000 0.000 0.000
## pri_nee_gov ~~
## pri_nee_int 0.000 0.000 0.000
## pri_nee_ano 0.000 0.000 0.000
## pri_nee_int ~~
## pri_nee_ano 0.000 0.000 0.000
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.SOC_1 0.986 0.112 8.808 0.000 0.986 0.465
## .N4P.SOC_2 1.097 0.132 8.297 0.000 1.097 0.495
## .N4P.SOC_3 0.860 0.116 7.390 0.000 0.860 0.414

```

##	.N4P.SOC_4	0.304	0.459	0.663	0.507	0.304	0.129
##	.N4P.SOC_9	0.932	0.141	6.633	0.000	0.932	0.409
##	.N4P.BOT_1	1.007	0.193	5.232	0.000	1.007	0.567
##	.N4P.INT_2	1.629	0.167	9.763	0.000	1.629	0.698
##	.N4P.INT_7	0.960	0.177	5.432	0.000	0.960	0.588
##	.N4P.INT_9	1.129	0.141	7.998	0.000	1.129	0.683
##	.N4P.SOC_6	1.543	0.170	9.067	0.000	1.543	0.664
##	.N4P.SOC_7	0.787	0.254	3.102	0.002	0.787	0.403
##	.N4P.SOC_8	1.432	0.213	6.709	0.000	1.432	0.659
##	pri_nee_gen	0.900	0.188	4.784	0.000	1.000	1.000
##	pri_nee_gov	0.235	0.177	1.329	0.184	1.000	1.000
##	pri_nee_int	0.622	0.187	3.318	0.001	1.000	1.000
##	pri_nee_ano	0.208	0.133	1.570	0.116	1.000	1.000

Bifactor-solution fits the data best.

## CFA privacy need government

```
## lavaan 0.6-3 ended normally after 23 iterations
##
## Optimization method NLMINB
## Number of free parameters 10
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 8.257 6.389
## Degrees of freedom 5 5
## P-value (Chi-square) 0.143 0.270
## Scaling correction factor 1.293
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 607.404 473.712
## Degrees of freedom 10 10
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.995 0.997
## Tucker-Lewis Index (TLI) 0.989 0.994
##
## Robust Comparative Fit Index (CFI) 0.997
## Robust Tucker-Lewis Index (TLI) 0.994
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -2160.169 -2160.169
## Loglikelihood unrestricted model (H1) -2156.040 -2156.040
##
## Number of free parameters 10 10
## Akaike (AIC) 4340.337 4340.337
## Bayesian (BIC) 4376.359 4376.359
## Sample-size adjusted Bayesian (BIC) 4344.652 4344.652
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.049 0.032
## 90 Percent Confidence Interval 0.000 0.106 0.000 0.088
## P-value RMSEA <= 0.05 0.439 0.634
##
## Robust RMSEA 0.036
## 90 Percent Confidence Interval 0.000 0.108
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.018 0.018
##
## Parameter Estimates:
```

```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov =~
## N4P.SOC_1 1.000 1.102 0.756
## N4P.SOC_2 0.959 0.093 10.286 0.000 1.056 0.710
## N4P.SOC_3 0.993 0.089 11.157 0.000 1.094 0.759
## N4P.SOC_4 1.153 0.088 13.044 0.000 1.271 0.826
## N4P.SOC_9 0.985 0.088 11.145 0.000 1.086 0.719
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.SOC_1 0.908 0.104 8.730 0.000 0.908 0.428
## .N4P.SOC_2 1.101 0.159 6.917 0.000 1.101 0.497
## .N4P.SOC_3 0.879 0.127 6.897 0.000 0.879 0.424
## .N4P.SOC_4 0.753 0.121 6.235 0.000 0.753 0.318
## .N4P.SOC_9 1.102 0.112 9.871 0.000 1.102 0.483
## pri_nee_gov 1.214 0.177 6.870 0.000 1.000 1.000

```

## CFA privacy need interpersonal

```
## lavaan 0.6-3 ended normally after 27 iterations
##
## Optimization method NLMINB
## Number of free parameters 8
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 11.236 10.606
## Degrees of freedom 2 2
## P-value (Chi-square) 0.004 0.005
## Scaling correction factor 1.059
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 128.455 113.497
## Degrees of freedom 6 6
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.925 0.920
## Tucker-Lewis Index (TLI) 0.774 0.760
##
## Robust Comparative Fit Index (CFI) 0.925
## Robust Tucker-Lewis Index (TLI) 0.775
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -1806.252 -1806.252
## Loglikelihood unrestricted model (H1) -1800.634 -1800.634
##
## Number of free parameters 8 8
## Akaike (AIC) 3628.504 3628.504
## Bayesian (BIC) 3657.321 3657.321
## Sample-size adjusted Bayesian (BIC) 3631.955 3631.955
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.131 0.126
## 90 Percent Confidence Interval 0.064 0.209 0.061 0.203
## P-value RMSEA <= 0.05 0.026 0.030
##
## Robust RMSEA 0.130
## 90 Percent Confidence Interval 0.061 0.211
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.046 0.046
##
## Parameter Estimates:
```

```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_int =~
## N4P.BOT_1 1.000 0.953 0.715
## N4P.INT_2 0.656 0.154 4.267 0.000 0.625 0.410
## N4P.INT_7 0.727 0.138 5.266 0.000 0.693 0.543
## N4P.INT_9 0.664 0.126 5.272 0.000 0.633 0.493
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.BOT_1 0.869 0.190 4.579 0.000 0.869 0.489
## .N4P.INT_2 1.934 0.162 11.913 0.000 1.934 0.832
## .N4P.INT_7 1.153 0.134 8.634 0.000 1.153 0.706
## .N4P.INT_9 1.251 0.151 8.281 0.000 1.251 0.757
## pri_nee_int 0.909 0.199 4.574 0.000 1.000 1.000

```

## CFA privacy need anonymity

```
## lavaan 0.6-3 ended normally after 30 iterations
##
## Optimization method NLMINB
## Number of free parameters 8
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 4.998 3.105
## Degrees of freedom 2 2
## P-value (Chi-square) 0.082 0.212
## Scaling correction factor 1.610
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 180.279 156.543
## Degrees of freedom 6 6
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.983 0.993
## Tucker-Lewis Index (TLI) 0.948 0.978
##
## Robust Comparative Fit Index (CFI) 0.990
## Robust Tucker-Lewis Index (TLI) 0.969
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -1874.773 -1874.773
## Loglikelihood unrestricted model (H1) -1872.274 -1872.274
##
## Number of free parameters 8 8
## Akaike (AIC) 3765.546 3765.546
## Bayesian (BIC) 3794.363 3794.363
## Sample-size adjusted Bayesian (BIC) 3768.998 3768.998
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.074 0.045
## 90 Percent Confidence Interval 0.000 0.159 0.000 0.118
## P-value RMSEA <= 0.05 0.229 0.450
##
## Robust RMSEA 0.057
## 90 Percent Confidence Interval 0.000 0.174
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.029 0.029
##
## Parameter Estimates:
```

```

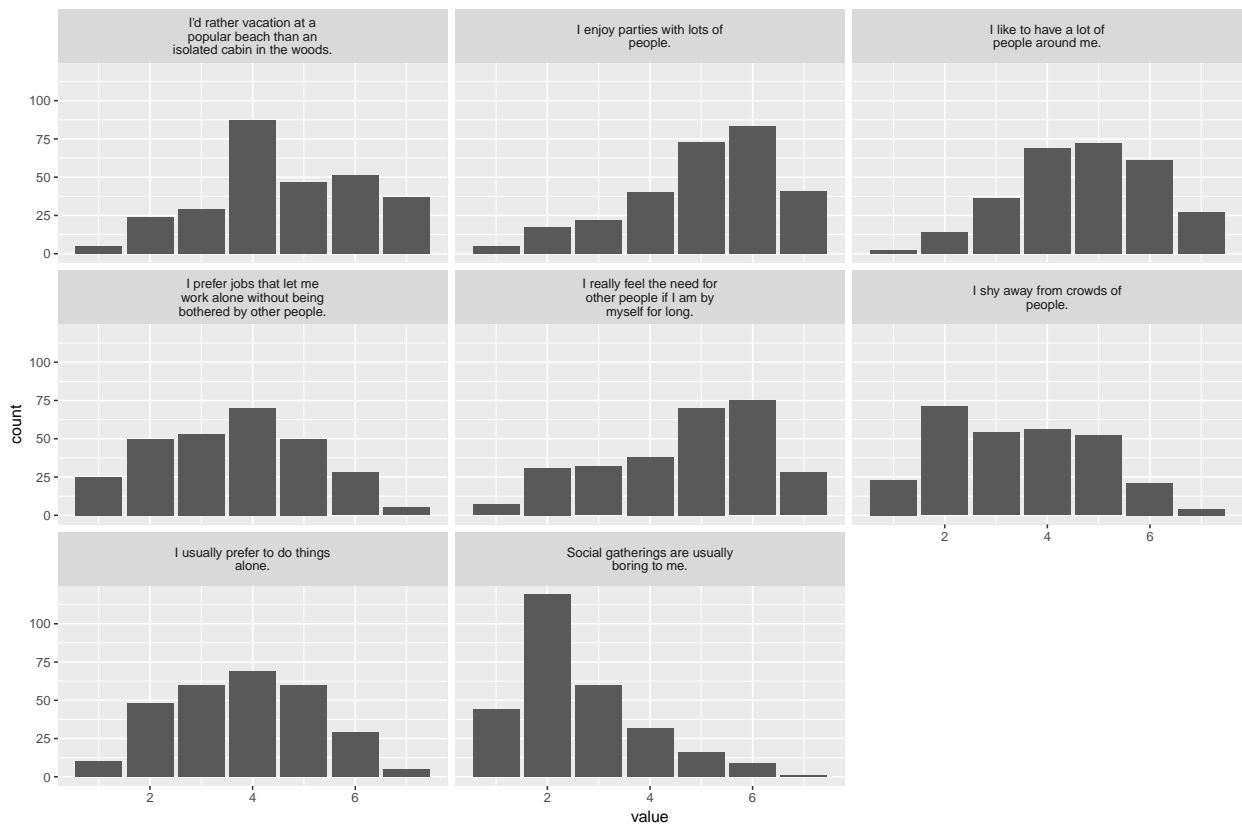
##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_ano =~
## N4P.SOC_6 1.000 0.894 0.587
## N4P.SOC_7 1.160 0.171 6.779 0.000 1.037 0.742
## N4P.SOC_8 0.971 0.145 6.683 0.000 0.869 0.589
## N4P.INT_2 0.843 0.131 6.451 0.000 0.754 0.495
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.SOC_6 1.523 0.194 7.869 0.000 1.523 0.656
## .N4P.SOC_7 0.876 0.182 4.801 0.000 0.876 0.449
## .N4P.SOC_8 1.419 0.199 7.135 0.000 1.419 0.653
## .N4P.INT_2 1.756 0.208 8.457 0.000 1.756 0.755
## pri_nee_ano 0.800 0.185 4.316 0.000 1.000 1.000

```



Sociability

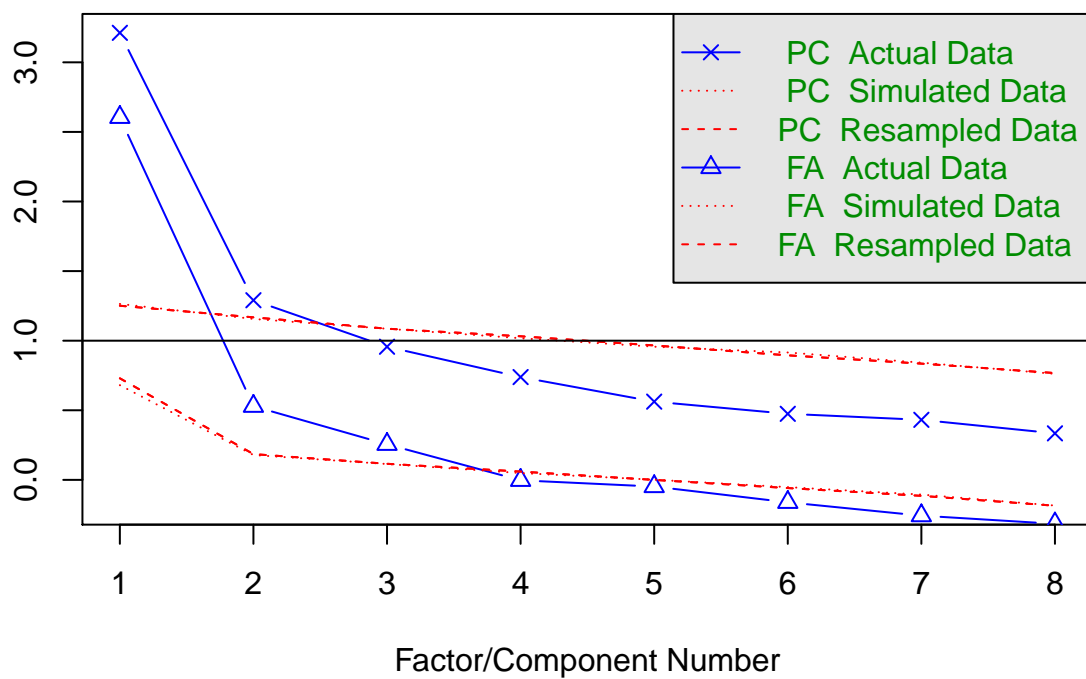
Items



## Parallel analysis

eigenvalues of principal components and factor analysis

### Parallel Analysis Scree Plots



## Parallel analysis suggests that the number of factors = 3 and the number of components = 2

## EFA 1

```
## Factor Analysis using method = ml
## Call: fa(r = d_tmp, nfactors = 3, fm = "ml")
## Standardized loadings (pattern matrix) based upon correlation matrix
##      ML2  ML3  ML1  h2  u2 com
## SOC_1  0.53  0.35 -0.14 0.52 0.480 1.9
## SOC_2  0.53  0.14  0.28 0.54 0.457 1.7
## SOC_3  0.04  0.62  0.09 0.43 0.567 1.1
## SOC_4  0.00  0.01  1.00 1.00 0.005 1.0
## SOC_5 -0.03  0.75 -0.01 0.55 0.452 1.0
## SOC_6  0.47 -0.18  0.11 0.21 0.786 1.4
## SOC_7  0.53  0.23  0.02 0.45 0.547 1.4
## SOC_8  0.85 -0.09 -0.01 0.65 0.345 1.0
##
##      ML2  ML3  ML1
## SS loadings      1.91 1.29 1.16
## Proportion Var    0.24 0.16 0.14
## Cumulative Var    0.24 0.40 0.54
## Proportion Explained 0.44 0.30 0.27
## Cumulative Proportion 0.44 0.73 1.00
##
## With factor correlations of
##      ML2  ML3  ML1
## ML2 1.00 0.44 0.29
## ML3 0.44 1.00 0.12
## ML1 0.29 0.12 1.00
##
## Mean item complexity = 1.3
## Test of the hypothesis that 3 factors are sufficient.
##
## The degrees of freedom for the null model are 28 and the objective function was 2.18 with Chi Square = 10.5
## The degrees of freedom for the model are 7 and the objective function was 0.07
##
## The root mean square of the residuals (RMSR) is 0.03
## The df corrected root mean square of the residuals is 0.05
##
## The harmonic number of observations is 271 with the empirical chi square 10.5 with prob < 0.16
## The total number of observations was 271 with Likelihood Chi Square = 18.1 with prob < 0.012
##
## Tucker Lewis Index of factoring reliability = 0.919
## RMSEA index = 0.078 and the 90 % confidence intervals are 0.034 0.121
## BIC = -21.1
## Fit based upon off diagonal values = 0.99
## Measures of factor score adequacy
##      ML2  ML3  ML1
## Correlation of (regression) scores with factors 0.90 0.85 1.00
## Multiple R square of scores with factors 0.81 0.72 0.99
## Minimum correlation of possible factor scores 0.63 0.45 0.99
```

## EFA 2

```
## Factor Analysis using method = ml
## Call: fa(r = d_tmp, nfactors = 2, fm = "ml")
## Standardized loadings (pattern matrix) based upon correlation matrix
##      ML1    ML2    h2    u2 com
## SOC_1  0.46  0.34 0.46 0.54 1.8
## SOC_2  0.70  0.07 0.54 0.46 1.0
## SOC_3  0.13  0.56 0.40 0.60 1.1
## SOC_4  0.43 -0.08 0.16 0.84 1.1
## SOC_5 -0.03  0.78 0.60 0.40 1.0
## SOC_6  0.54 -0.21 0.24 0.76 1.3
## SOC_7  0.52  0.24 0.44 0.56 1.4
## SOC_8  0.78 -0.05 0.58 0.42 1.0
##
##
##      ML1    ML2
## SS loadings      2.16 1.25
## Proportion Var    0.27 0.16
## Cumulative Var    0.27 0.43
## Proportion Explained 0.63 0.37
## Cumulative Proportion 0.63 1.00
##
## With factor correlations of
##      ML1    ML2
## ML1 1.00 0.43
## ML2 0.43 1.00
##
## Mean item complexity = 1.2
## Test of the hypothesis that 2 factors are sufficient.
##
## The degrees of freedom for the null model are 28 and the objective function was 2.18 with Chi Square = 49.9
## The degrees of freedom for the model are 13 and the objective function was 0.25
##
## The root mean square of the residuals (RMSR) is 0.06
## The df corrected root mean square of the residuals is 0.08
##
## The harmonic number of observations is 271 with the empirical chi square 49.9 with prob < 3.1e-09
## The total number of observations was 271 with Likelihood Chi Square = 65.8 with prob < 4.6e-09
##
## Tucker Lewis Index of factoring reliability = 0.793
## RMSEA index = 0.124 and the 90 % confidence intervals are 0.094 0.153
## BIC = -6.99
## Fit based upon off diagonal values = 0.97
## Measures of factor score adequacy
##
##      ML1    ML2
## Correlation of (regression) scores with factors 0.90 0.85
## Multiple R square of scores with factors 0.81 0.73
## Minimum correlation of possible factor scores 0.62 0.46
```

## CFA 1

```
## lavaan 0.6-3 ended normally after 48 iterations
##
## Optimization method          NLMINB
## Number of free parameters    18
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     77.016  67.623
## Degrees of freedom           18      18
## P-value (Chi-square)         0.000   0.000
## Scaling correction factor     1.139
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 591.662 499.927
## Degrees of freedom             28      28
## P-value                        0.000   0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      0.895   0.895
## Tucker-Lewis Index (TLI)        0.837   0.836
##
## Robust Comparative Fit Index (CFI)      0.899
## Robust Tucker-Lewis Index (TLI)        0.843
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)      -3621.144 -3621.144
## Loglikelihood unrestricted model (H1) -3582.636 -3582.636
##
## Number of free parameters          18      18
## Akaike (AIC)                      7278.288 7278.288
## Bayesian (BIC)                     7343.126 7343.126
## Sample-size adjusted Bayesian (BIC) 7286.054 7286.054
##
## Root Mean Square Error of Approximation:
##
## RMSEA                            0.110   0.101
## 90 Percent Confidence Interval    0.085 0.136   0.077 0.125
## P-value RMSEA <= 0.05            0.000   0.000
##
## Robust RMSEA                      0.108
## 90 Percent Confidence Interval    0.081 0.136
##
## Standardized Root Mean Square Residual:
##
## SRMR                            0.082   0.082
##
## Parameter Estimates:
```

```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## soc_1 =~
## SOC_1 (a) 1.000 0.664 0.430
## SOC_3 (a) 1.000 0.664 0.471
## SOC_5 (a) 1.000 0.664 0.453
## SOC_7 (a) 1.000 0.664 0.522
## soc_2 =~
## SOC_1 (b) 1.000 0.712 0.461
## SOC_2 (b) 1.000 0.712 0.526
## SOC_4 (b) 1.000 0.712 0.429
## SOC_6 (b) 1.000 0.712 0.454
## SOC_7 (b) 1.000 0.712 0.560
## SOC_8 (b) 1.000 0.712 0.510
## soc_gen =~
## SOC_1 1.000 0.531 0.344
## SOC_2 1.725 0.429 4.022 0.000 0.916 0.676
## SOC_3 1.444 0.351 4.114 0.000 0.767 0.545
## SOC_4 1.022 0.344 2.973 0.003 0.543 0.327
## SOC_5 1.259 0.299 4.207 0.000 0.668 0.456
## SOC_6 0.496 0.247 2.007 0.045 0.264 0.168
## SOC_7 0.417 0.178 2.349 0.019 0.222 0.174
## SOC_8 0.918 0.197 4.652 0.000 0.487 0.349
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## soc_1 ~~
## soc_2 0.000 0.000 0.000
## soc_gen 0.000 0.000 0.000
## soc_2 ~~
## soc_gen 0.000 0.000 0.000
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .SOC_1 1.156 0.115 10.025 0.000 1.156 0.484
## .SOC_3 0.953 0.142 6.729 0.000 0.953 0.481
## .SOC_5 1.258 0.143 8.821 0.000 1.258 0.586
## .SOC_7 0.622 0.117 5.331 0.000 0.622 0.384
## .SOC_2 0.490 0.156 3.138 0.002 0.490 0.267
## .SOC_4 1.957 0.188 10.428 0.000 1.957 0.709
## .SOC_6 1.890 0.153 12.326 0.000 1.890 0.766
## .SOC_8 1.208 0.132 9.145 0.000 1.208 0.618
## soc_1 0.440 0.088 5.009 0.000 1.000 1.000
## soc_2 0.508 0.086 5.928 0.000 1.000 1.000
## soc_gen 0.282 0.129 2.189 0.029 1.000 1.000

```

Shows no solution for two factors.

## CFA 2

```
## lavaan 0.6-3 ended normally after 28 iterations
##
## Optimization method          NLMINB
## Number of free parameters    12
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     72.206  56.836
## Degrees of freedom           9        9
## P-value (Chi-square)         0.000    0.000
## Scaling correction factor     1.270
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 432.469 343.913
## Degrees of freedom             15      15
## P-value                        0.000    0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      0.849    0.855
## Tucker-Lewis Index (TLI)        0.748    0.758
##
## Robust Comparative Fit Index (CFI)      0.853
## Robust Tucker-Lewis Index (TLI)        0.755
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)      -2728.562 -2728.562
## Loglikelihood unrestricted model (H1) -2692.459 -2692.459
##
## Number of free parameters          12      12
## Akaike (AIC)                      5481.124  5481.124
## Bayesian (BIC)                    5524.350  5524.350
## Sample-size adjusted Bayesian (BIC) 5486.301  5486.301
##
## Root Mean Square Error of Approximation:
##
## RMSEA                            0.161    0.140
## 90 Percent Confidence Interval    0.128  0.196    0.110  0.172
## P-value RMSEA <= 0.05            0.000    0.000
##
## Robust RMSEA                      0.158
## 90 Percent Confidence Interval    0.120  0.198
##
## Standardized Root Mean Square Residual:
##
## SRMR                            0.072    0.072
##
## Parameter Estimates:
```

```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## soc_gen =~
## SOC_1 1.000 0.939 0.630
## SOC_2 1.055 0.113 9.344 0.000 0.991 0.726
## SOC_4 0.634 0.127 5.011 0.000 0.596 0.376
## SOC_6 0.667 0.118 5.646 0.000 0.626 0.408
## SOC_7 0.875 0.094 9.269 0.000 0.822 0.650
## SOC_8 1.177 0.116 10.161 0.000 1.105 0.752
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .SOC_1 1.337 0.136 9.840 0.000 1.337 0.603
## .SOC_2 0.883 0.124 7.133 0.000 0.883 0.473
## .SOC_4 2.155 0.174 12.356 0.000 2.155 0.859
## .SOC_6 1.968 0.155 12.676 0.000 1.968 0.834
## .SOC_7 0.921 0.131 7.020 0.000 0.921 0.577
## .SOC_8 0.939 0.146 6.435 0.000 0.939 0.435
## soc_gen 0.882 0.162 5.459 0.000 1.000 1.000

```

Uni-dimensional solution with 6 items not feasible; need to reduce to 4.



### CFA 3

```
## lavaan 0.6-3 ended normally after 23 iterations
##
## Optimization method NLMINB
## Number of free parameters 8
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 7.689 5.941
## Degrees of freedom 2 2
## P-value (Chi-square) 0.021 0.051
## Scaling correction factor 1.294
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 302.882 226.845
## Degrees of freedom 6 6
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.981 0.982
## Tucker-Lewis Index (TLI) 0.943 0.946
##
## Robust Comparative Fit Index (CFI) 0.983
## Robust Tucker-Lewis Index (TLI) 0.948
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -1750.928 -1750.928
## Loglikelihood unrestricted model (H1) -1747.083 -1747.083
##
## Number of free parameters 8 8
## Akaike (AIC) 3517.856 3517.856
## Bayesian (BIC) 3546.673 3546.673
## Sample-size adjusted Bayesian (BIC) 3521.307 3521.307
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.102 0.085
## 90 Percent Confidence Interval 0.034 0.183 0.018 0.158
## P-value RMSEA <= 0.05 0.093 0.152
##
## Robust RMSEA 0.097
## 90 Percent Confidence Interval NA 0.192
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.027 0.027
##
## Parameter Estimates:
```

```

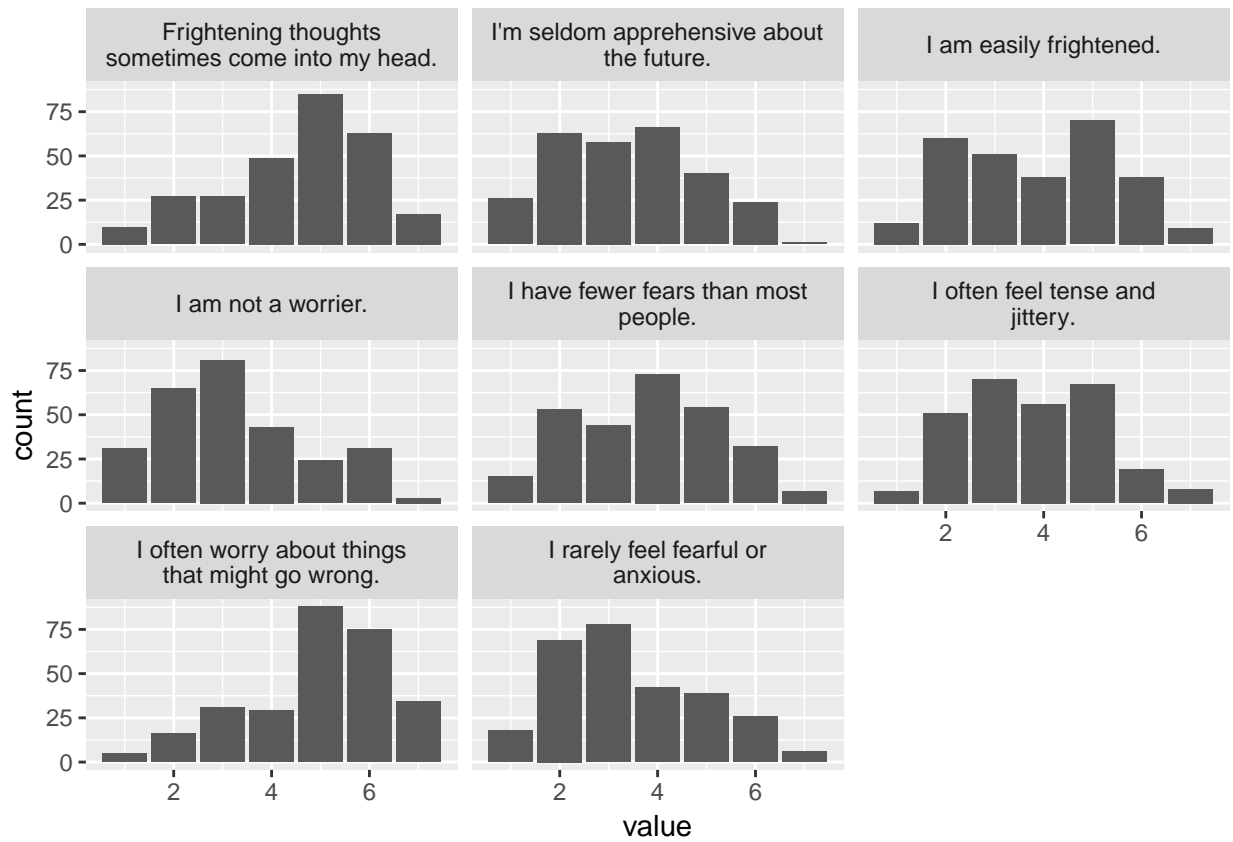
##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## soc_gen =~
## SOC_1 1.000 1.025 0.688
## SOC_2 0.891 0.102 8.697 0.000 0.913 0.669
## SOC_7 0.845 0.092 9.214 0.000 0.867 0.686
## SOC_8 1.058 0.106 9.983 0.000 1.085 0.738
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .SOC_1 1.169 0.132 8.829 0.000 1.169 0.527
## .SOC_2 1.031 0.132 7.797 0.000 1.031 0.553
## .SOC_7 0.846 0.126 6.718 0.000 0.846 0.530
## .SOC_8 0.984 0.169 5.841 0.000 0.984 0.455
## soc_gen 1.051 0.170 6.176 0.000 1.000 1.000

```

Shows adequate fit.

## Anxiety

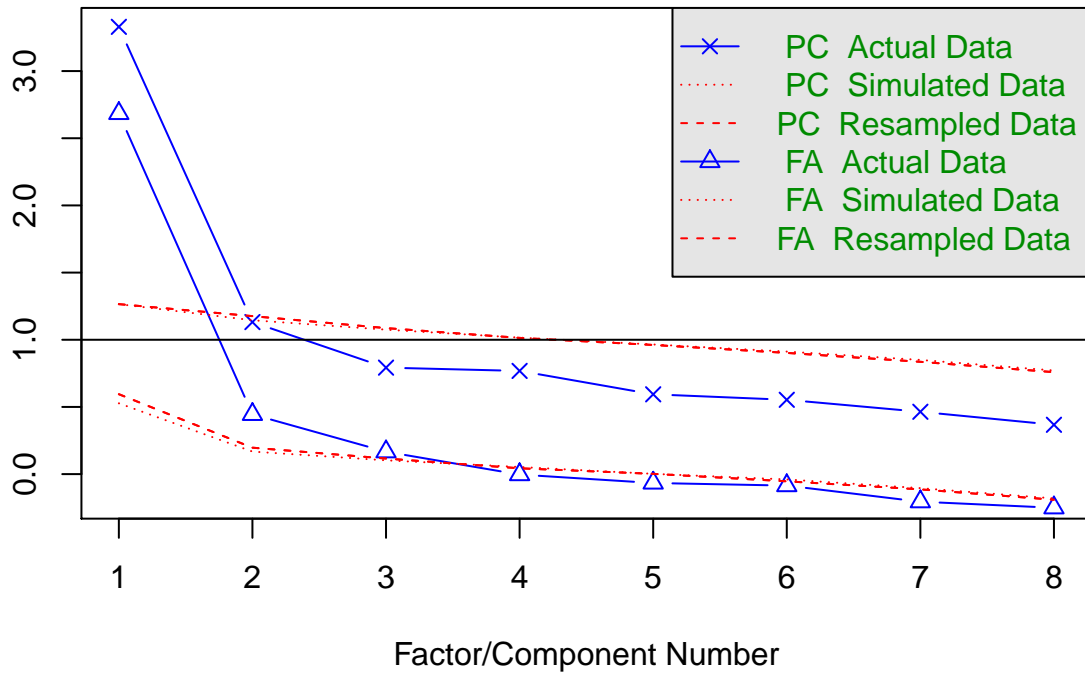
### Items



## Parallel analysis

eigenvalues of principal components and factor analysis

### Parallel Analysis Scree Plots



## Parallel analysis suggests that the number of factors = 3 and the number of components = 1  
Implies one dimension.

## CFA 1

```

## lavaan 0.6-3 ended normally after 30 iterations
##
## Optimization method          NLMINB
## Number of free parameters    16
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     101.511  73.802
## Degrees of freedom           20      20
## P-value (Chi-square)         0.000    0.000
## Scaling correction factor     1.375
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic  556.196  454.497
## Degrees of freedom              28      28
## P-value                        0.000    0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      0.846    0.874
## Tucker-Lewis Index (TLI)        0.784    0.823
##
## Robust Comparative Fit Index (CFI)      0.858
## Robust Tucker-Lewis Index (TLI)        0.802
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)      -3682.499  -3682.499
## Loglikelihood unrestricted model (H1) -3631.743  -3631.743
##
## Number of free parameters          16      16
## Akaike (AIC)                      7396.998  7396.998
## Bayesian (BIC)                    7454.632  7454.632
## Sample-size adjusted Bayesian (BIC)  7403.900  7403.900
##
## Root Mean Square Error of Approximation:
##
## RMSEA                            0.123    0.100
## 90 Percent Confidence Interval    0.100  0.147    0.079  0.121
## P-value RMSEA <= 0.05            0.000    0.000
##
## Robust RMSEA                      0.117
## 90 Percent Confidence Interval    0.089  0.146
##
## Standardized Root Mean Square Residual:
##
## SRMR                            0.069    0.069
##
## Parameter Estimates:

```

```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## fea_gen =~
## FEA_2 1.000 0.914 0.584
## FEA_4 0.861 0.129 6.680 0.000 0.788 0.570
## FEA_7 1.003 0.138 7.289 0.000 0.917 0.618
## FEA_8 0.992 0.132 7.489 0.000 0.907 0.615
## FEA_1 1.060 0.151 7.041 0.000 0.969 0.644
## FEA_3 0.928 0.156 5.930 0.000 0.848 0.571
## FEA_5 0.570 0.124 4.581 0.000 0.521 0.362
## FEA_6 0.969 0.141 6.852 0.000 0.886 0.621
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .FEA_2 1.614 0.185 8.715 0.000 1.614 0.659
## .FEA_4 1.288 0.125 10.312 0.000 1.288 0.675
## .FEA_7 1.361 0.152 8.946 0.000 1.361 0.618
## .FEA_8 1.349 0.140 9.604 0.000 1.349 0.621
## .FEA_1 1.326 0.164 8.090 0.000 1.326 0.585
## .FEA_3 1.487 0.198 7.496 0.000 1.487 0.674
## .FEA_5 1.796 0.149 12.030 0.000 1.796 0.869
## .FEA_6 1.248 0.158 7.905 0.000 1.248 0.614
## fea_gen 0.836 0.186 4.487 0.000 1.000 1.000

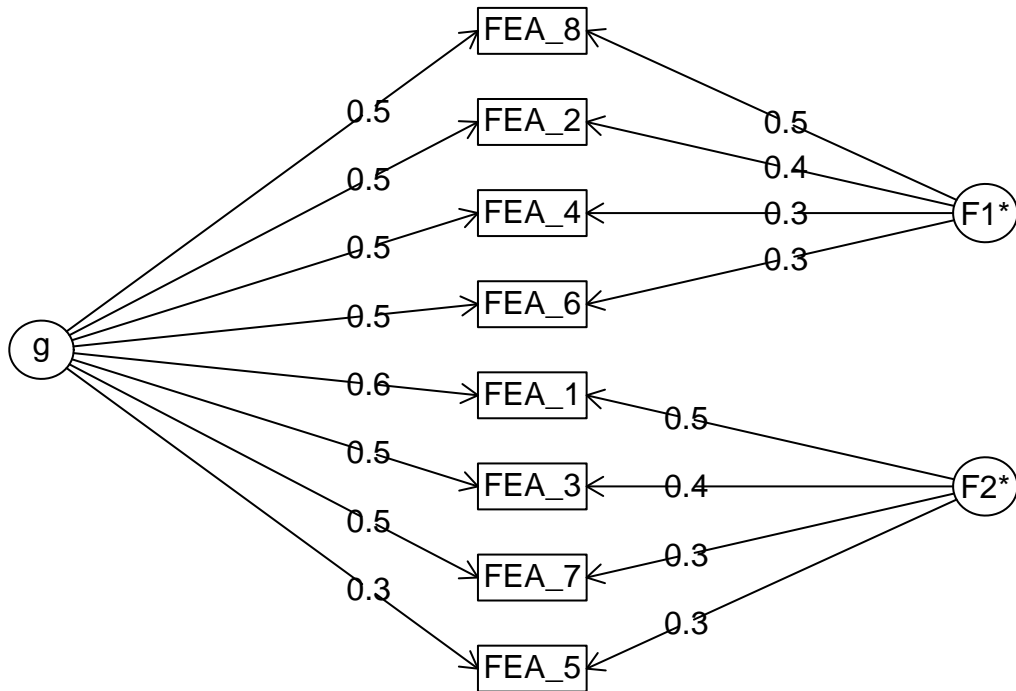
```

Doesn't fit. Instead, try two dimensions.

## EFA

```
## Factor Analysis using method = ml
## Call: fa(r = d_tmp, nfactors = 2, fm = "ml")
## Standardized loadings (pattern matrix) based upon correlation matrix
##      ML2    ML1    h2    u2 com
## FEA_1 -0.03  0.83 0.65 0.35 1.0
## FEA_2  0.62  0.03 0.41 0.59 1.0
## FEA_3  0.04  0.62 0.42 0.58 1.0
## FEA_4  0.53  0.10 0.35 0.65 1.1
## FEA_5  0.00  0.41 0.16 0.84 1.0
## FEA_6  0.47  0.24 0.40 0.60 1.5
## FEA_7  0.27  0.41 0.37 0.63 1.7
## FEA_8  0.79 -0.07 0.57 0.43 1.0
##
##
##      ML2    ML1
## SS loadings      1.73 1.61
## Proportion Var    0.22 0.20
## Cumulative Var    0.22 0.42
## Proportion Explained 0.52 0.48
## Cumulative Proportion 0.52 1.00
##
## With factor correlations of
##      ML2    ML1
## ML2 1.00 0.57
## ML1 0.57 1.00
##
## Mean item complexity = 1.2
## Test of the hypothesis that 2 factors are sufficient.
##
## The degrees of freedom for the null model are 28 and the objective function was 2.05 with Chi Squ
## The degrees of freedom for the model are 13 and the objective function was 0.15
##
## The root mean square of the residuals (RMSR) is 0.04
## The df corrected root mean square of the residuals is 0.06
##
## The harmonic number of observations is 271 with the empirical chi square 29.4 with prob < 0.0058
## The total number of observations was 271 with Likelihood Chi Square = 39.6 with prob < 0.00016
##
## Tucker Lewis Index of factoring reliability = 0.889
## RMSEA index = 0.088 and the 90 % confidence intervals are 0.057 0.119
## BIC = -33.2
## Fit based upon off diagonal values = 0.98
## Measures of factor score adequacy
##
##      ML2    ML1
## Correlation of (regression) scores with factors 0.88 0.89
## Multiple R square of scores with factors        0.77 0.78
## Minimum correlation of possible factor scores    0.55 0.57
```

## Omega



Seems appropriate.



## CFA 2

```
## lavaan 0.6-3 ended normally after 36 iterations
##
## Optimization method NLMINB
## Number of free parameters 18
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 49.934 38.047
## Degrees of freedom 18 18
## P-value (Chi-square) 0.000 0.004
## Scaling correction factor 1.312
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 556.196 454.497
## Degrees of freedom 28 28
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.940 0.953
## Tucker-Lewis Index (TLI) 0.906 0.927
##
## Robust Comparative Fit Index (CFI) 0.950
## Robust Tucker-Lewis Index (TLI) 0.922
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -3656.710 -3656.710
## Loglikelihood unrestricted model (H1) -3631.743 -3631.743
##
## Number of free parameters 18 18
## Akaike (AIC) 7349.421 7349.421
## Bayesian (BIC) 7414.259 7414.259
## Sample-size adjusted Bayesian (BIC) 7357.186 7357.186
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.081 0.064
## 90 Percent Confidence Interval 0.055 0.108 0.039 0.089
## P-value RMSEA <= 0.05 0.028 0.162
##
## Robust RMSEA 0.073
## 90 Percent Confidence Interval 0.040 0.106
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.042 0.042
##
## Parameter Estimates:
```

```

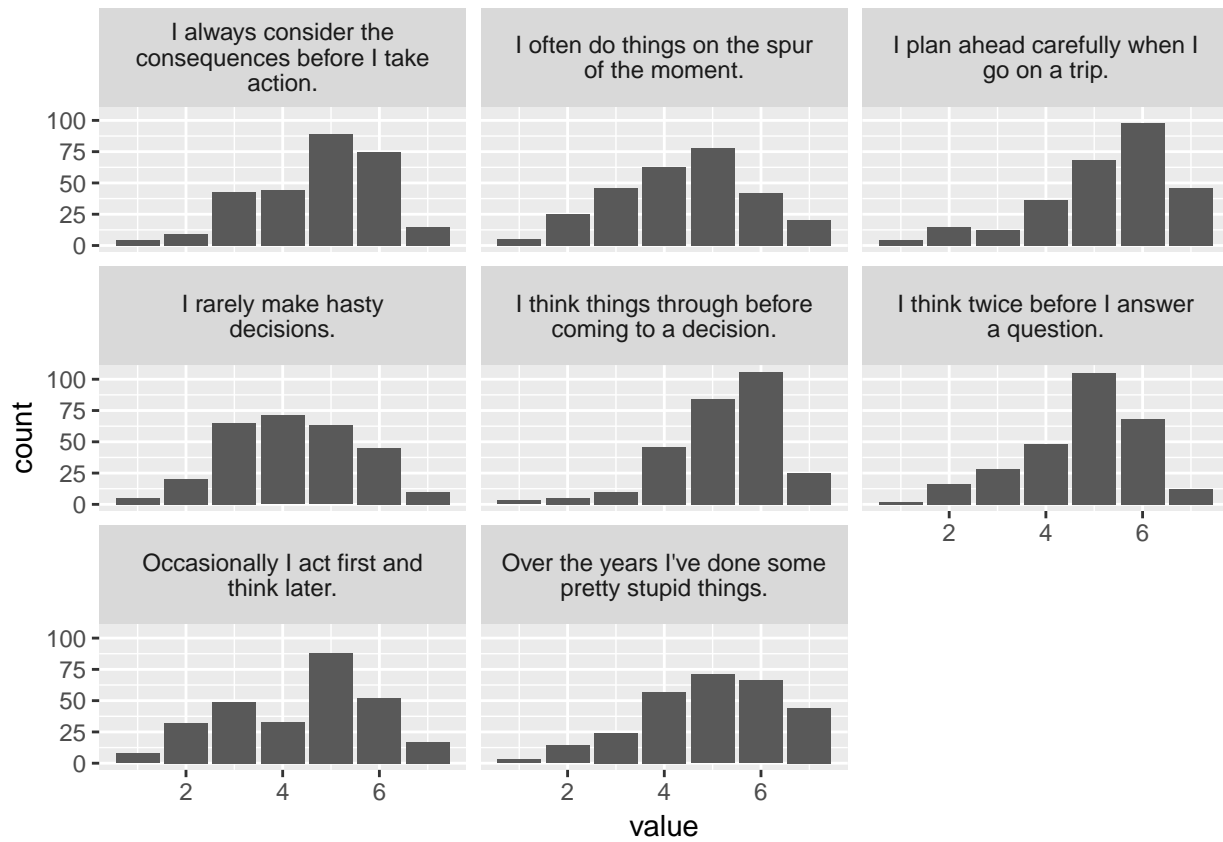
##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## fea_1 =~
## FEA_2 (a) 1.000 0.477 0.303
## FEA_4 (a) 1.000 0.477 0.346
## FEA_6 (a) 1.000 0.477 0.333
## FEA_8 (a) 1.000 0.477 0.326
## fea_2 =~
## FEA_1 (b) 1.000 0.562 0.374
## FEA_3 (b) 1.000 0.562 0.380
## FEA_5 (b) 1.000 0.562 0.390
## FEA_7 (b) 1.000 0.562 0.375
## fea_gen =~
## FEA_2 1.000 0.866 0.551
## FEA_4 0.834 0.143 5.841 0.000 0.722 0.523
## FEA_7 0.958 0.284 3.368 0.001 0.829 0.554
## FEA_8 0.992 0.152 6.542 0.000 0.859 0.587
## FEA_1 1.043 0.299 3.489 0.000 0.904 0.602
## FEA_3 0.893 0.276 3.238 0.001 0.773 0.524
## FEA_5 0.455 0.202 2.251 0.024 0.394 0.274
## FEA_6 0.958 0.158 6.056 0.000 0.830 0.579
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## fea_1 ~~
## fea_2 0.000 0.000 0.000
## fea_gen 0.000 0.000 0.000
## fea_2 ~~
## fea_gen 0.000 0.000 0.000
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .FEA_2 1.493 0.184 8.100 0.000 1.493 0.604
## .FEA_4 1.156 0.118 9.802 0.000 1.156 0.607
## .FEA_6 1.135 0.152 7.475 0.000 1.135 0.553
## .FEA_8 1.174 0.129 9.103 0.000 1.174 0.549
## .FEA_1 1.121 0.152 7.398 0.000 1.121 0.498
## .FEA_3 1.266 0.190 6.655 0.000 1.266 0.581
## .FEA_5 1.601 0.159 10.086 0.000 1.601 0.773
## .FEA_7 1.236 0.152 8.151 0.000 1.236 0.552
## fea_1 0.227 0.193 1.177 0.239 1.000 1.000
## fea_2 0.315 0.178 1.773 0.076 1.000 1.000
## fea_gen 0.750 0.253 2.968 0.003 1.000 1.000

```

Shows an adequate solution.

## Risk Avoidance

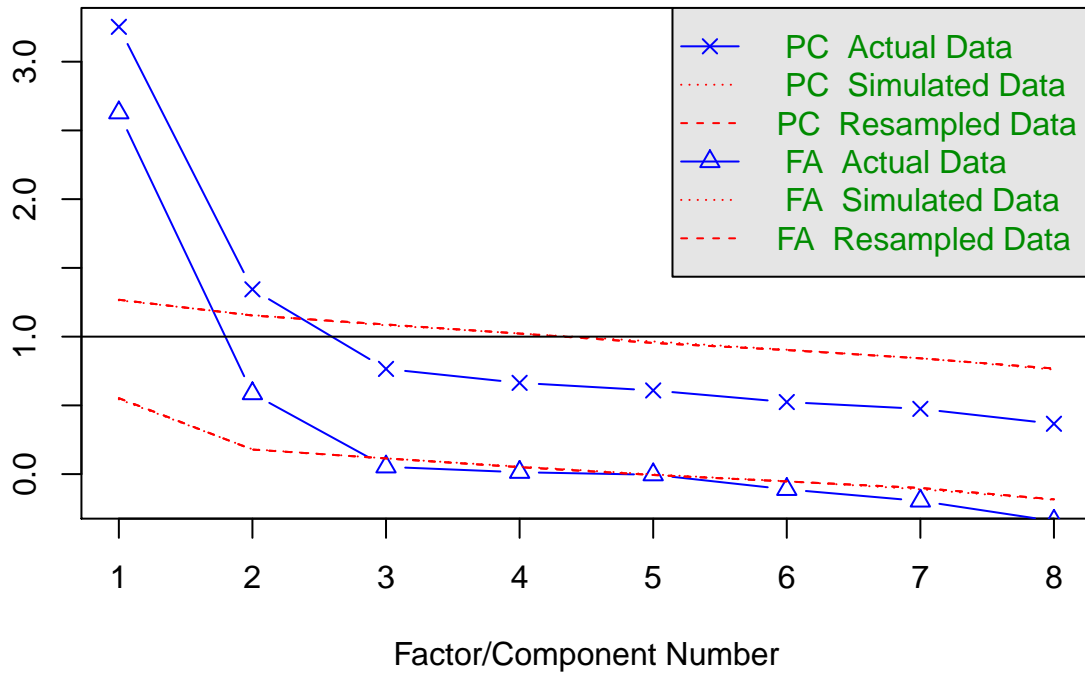
### Items



## Parallel analysis

eigenvalues of principal components and factor analysis

### Parallel Analysis Scree Plots

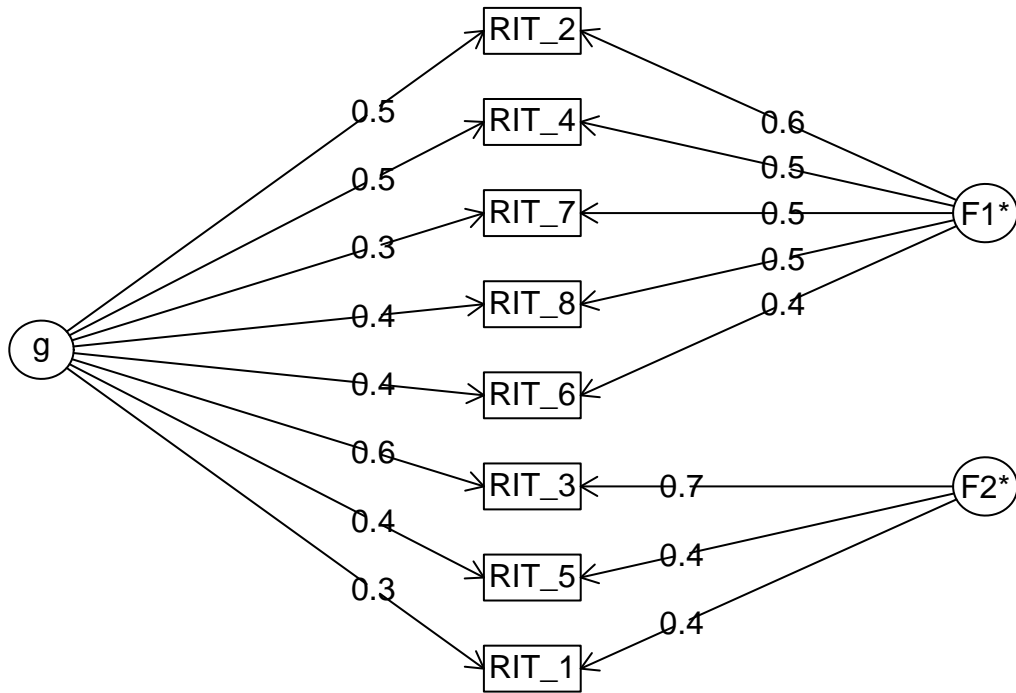


## Parallel analysis suggests that the number of factors = 2 and the number of components = 2

## EFA

```
## Factor Analysis using method = ml
## Call: fa(r = d_tmp, nfactors = 2, fm = "ml")
## Standardized loadings (pattern matrix) based upon correlation matrix
##      ML2   ML1   h2   u2 com
## RIT_1  0.00  0.47 0.22 0.78 1.0
## RIT_2  0.75 -0.04 0.55 0.45 1.0
## RIT_3 -0.01  0.90 0.80 0.20 1.0
## RIT_4  0.68  0.12 0.54 0.46 1.1
## RIT_5  0.20  0.48 0.35 0.65 1.3
## RIT_6  0.55  0.10 0.35 0.65 1.1
## RIT_7  0.65 -0.16 0.36 0.64 1.1
## RIT_8  0.61  0.07 0.42 0.58 1.0
##
##                               ML2  ML1
## SS loadings                   2.21 1.37
## Proportion Var                 0.28 0.17
## Cumulative Var                 0.28 0.45
## Proportion Explained           0.62 0.38
## Cumulative Proportion          0.62 1.00
##
## With factor correlations of
##      ML2  ML1
## ML2 1.00 0.42
## ML1 0.42 1.00
##
## Mean item complexity = 1.1
## Test of the hypothesis that 2 factors are sufficient.
##
## The degrees of freedom for the null model are 28 and the objective function was 2.09 with Chi Squ
## The degrees of freedom for the model are 13 and the objective function was 0.08
##
## The root mean square of the residuals (RMSR) is 0.03
## The df corrected root mean square of the residuals is 0.05
##
## The harmonic number of observations is 271 with the empirical chi square 15.1 with prob < 0.3
## The total number of observations was 271 with Likelihood Chi Square = 21.7 with prob < 0.06
##
## Tucker Lewis Index of factoring reliability = 0.964
## RMSEA index = 0.051 and the 90 % confidence intervals are 0 0.085
## BIC = -51.1
## Fit based upon off diagonal values = 0.99
## Measures of factor score adequacy
##
##                               ML2  ML1
## Correlation of (regression) scores with factors 0.90 0.91
## Multiple R square of scores with factors         0.81 0.83
## Minimum correlation of possible factor scores    0.62 0.66
```

## Omega



Produces a fitting solution.

# CFA 1

```
## lavaan 0.6-3 did NOT end normally after 2845 iterations
## ** WARNING ** Estimates below are most likely unreliable
##
## Optimization method          NLMINB
## Number of free parameters    24
##
## Number of observations       271
##
## Estimator                    ML
## Model Fit Test Statistic     NA
## Degrees of freedom           NA
## P-value                      NA
##
## Parameter Estimates:
##
## Information                  Expected
## Information saturated (h1) model Structured
## Standard Errors              Robust.sem
##
## Latent Variables:
##      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## rit_1 =~
##   RIT_2      (a)   1.000          0.973   0.868
##   RIT_4      (a)   1.000          0.973   0.770
##   RIT_5          19.704         NA    19.178  13.559
##   RIT_6      (a)   1.000          0.973   0.739
##   RIT_7      (a)   1.000          0.973   0.713
##   RIT_8      (a)   1.000          0.973   0.779
## rit_2 =~
##   RIT_1          1.000          0.232   0.165
##   RIT_3          2.156         NA    0.499   0.329
##   RIT_5          355.275        NA   82.251  58.151
## rit_gen =~
##   RIT_1          1.000          0.899   0.640
##   RIT_2          1.161         NA    1.044   0.931
##   RIT_3          2.005         NA    1.803   1.187
##   RIT_4          1.364         NA    1.227   0.970
##   RIT_5          103.308        NA   92.890  65.672
##   RIT_6          1.108         NA    0.996   0.757
##   RIT_7          0.995         NA    0.895   0.656
##   RIT_8          1.256         NA    1.129   0.904
##
## Covariances:
##      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## rit_1 ~~
##   rit_2          0.121         NA    0.537   0.537
##   rit_gen        -0.592         NA   -0.677  -0.677
## rit_2 ~~
##   rit_gen        -0.202         NA   -0.972  -0.972
##
## Variances:
##      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
```

##	.RIT_2	0.594	NA	0.594	0.473
##	.RIT_4	0.763	NA	0.763	0.477
##	.RIT_5	-192.914	NA	-192.914	-96.426
##	.RIT_6	1.105	NA	1.105	0.638
##	.RIT_7	1.294	NA	1.294	0.694
##	.RIT_8	0.825	NA	0.825	0.529
##	.RIT_1	1.516	NA	1.516	0.768
##	.RIT_3	0.556	NA	0.556	0.241
##	rit_1	0.947	NA	1.000	1.000
##	rit_2	0.054	NA	1.000	1.000
##	rit_gen	0.808	NA	1.000	1.000

Does not produce a good-fitting model.



## CFA 2

```
## lavaan 0.6-3 ended normally after 24 iterations
##
## Optimization method NLMINB
## Number of free parameters 10
##
## Number of observations 271
##
## Estimator ML Robust
## Model Fit Test Statistic 6.550 5.158
## Degrees of freedom 5 5
## P-value (Chi-square) 0.256 0.397
## Scaling correction factor 1.270
## for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 352.404 212.316
## Degrees of freedom 10 10
## P-value 0.000 0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI) 0.995 0.999
## Tucker-Lewis Index (TLI) 0.991 0.998
##
## Robust Comparative Fit Index (CFI) 0.999
## Robust Tucker-Lewis Index (TLI) 0.999
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0) -2063.329 -2063.329
## Loglikelihood unrestricted model (H1) -2060.054 -2060.054
##
## Number of free parameters 10 10
## Akaike (AIC) 4146.658 4146.658
## Bayesian (BIC) 4182.679 4182.679
## Sample-size adjusted Bayesian (BIC) 4150.972 4150.972
##
## Root Mean Square Error of Approximation:
##
## RMSEA 0.034 0.011
## 90 Percent Confidence Interval 0.000 0.096 0.000 0.079
## P-value RMSEA <= 0.05 0.587 0.756
##
## Robust RMSEA 0.012
## 90 Percent Confidence Interval 0.000 0.097
##
## Standardized Root Mean Square Residual:
##
## SRMR 0.023 0.023
##
## Parameter Estimates:
```

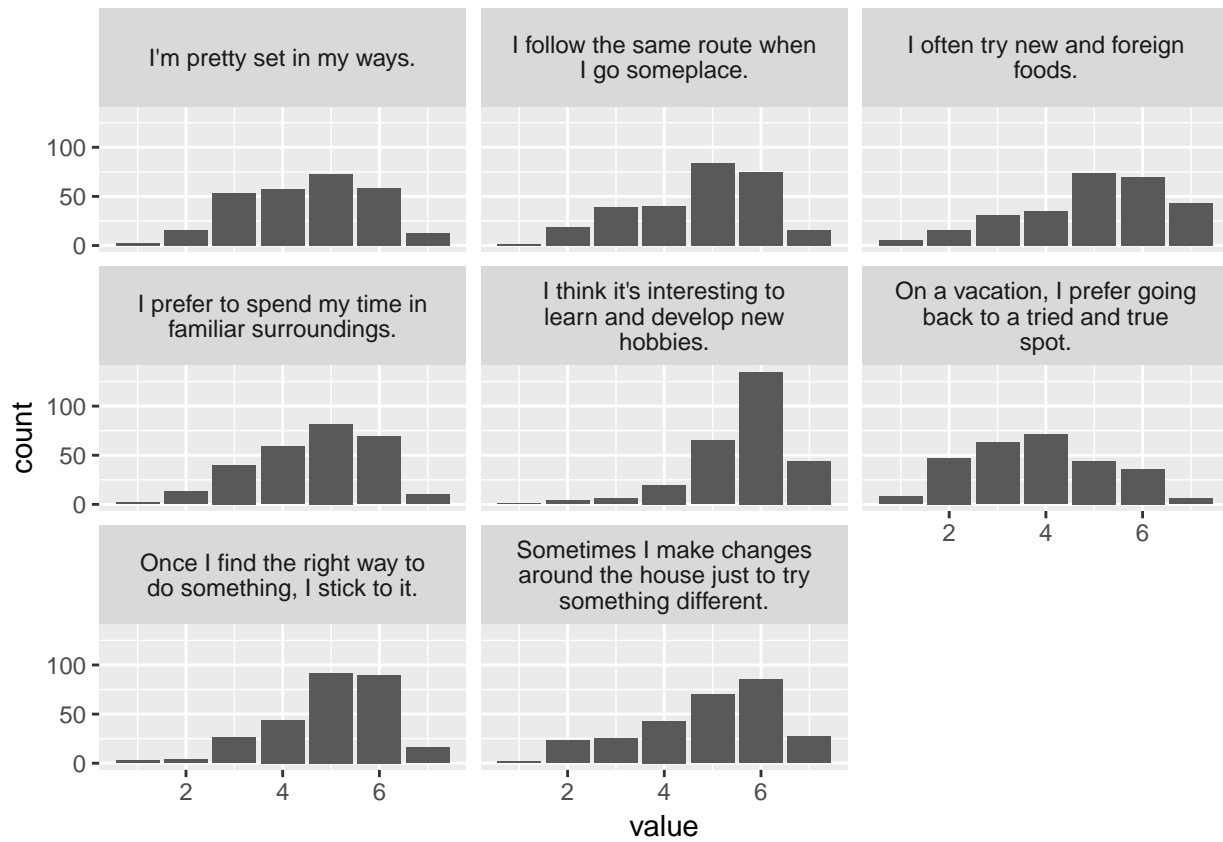
```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## rit_gen =~
## RIT_2 1.000 0.128 8.983 0.000 0.820 0.733
## RIT_4 1.150 0.128 8.983 0.000 0.943 0.735
## RIT_6 0.942 0.115 8.196 0.000 0.773 0.584
## RIT_7 0.940 0.097 9.723 0.000 0.771 0.561
## RIT_8 0.968 0.093 10.406 0.000 0.794 0.652
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .RIT_2 0.580 0.078 7.394 0.000 0.580 0.463
## .RIT_4 0.758 0.109 6.976 0.000 0.758 0.460
## .RIT_6 1.152 0.112 10.271 0.000 1.152 0.659
## .RIT_7 1.294 0.167 7.730 0.000 1.294 0.685
## .RIT_8 0.853 0.101 8.449 0.000 0.853 0.575
## rit_gen 0.673 0.133 5.045 0.000 1.000 1.000

```

## Traditionalism

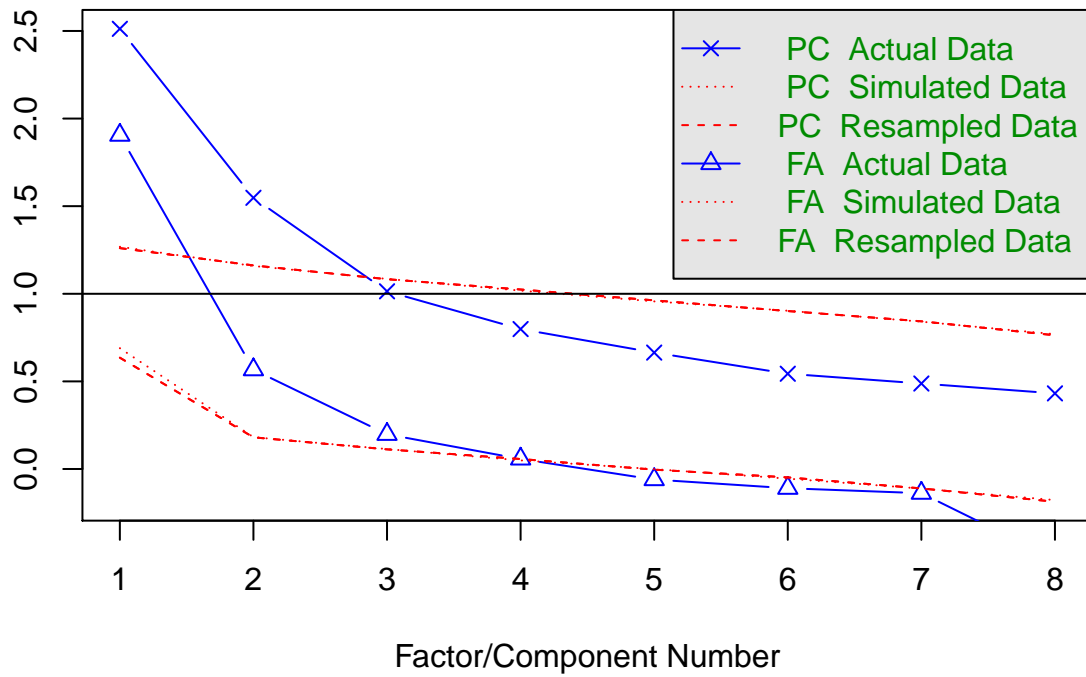
### Items



## Parallel analysis

eigenvalues of principal components and factor analysis

### Parallel Analysis Scree Plots

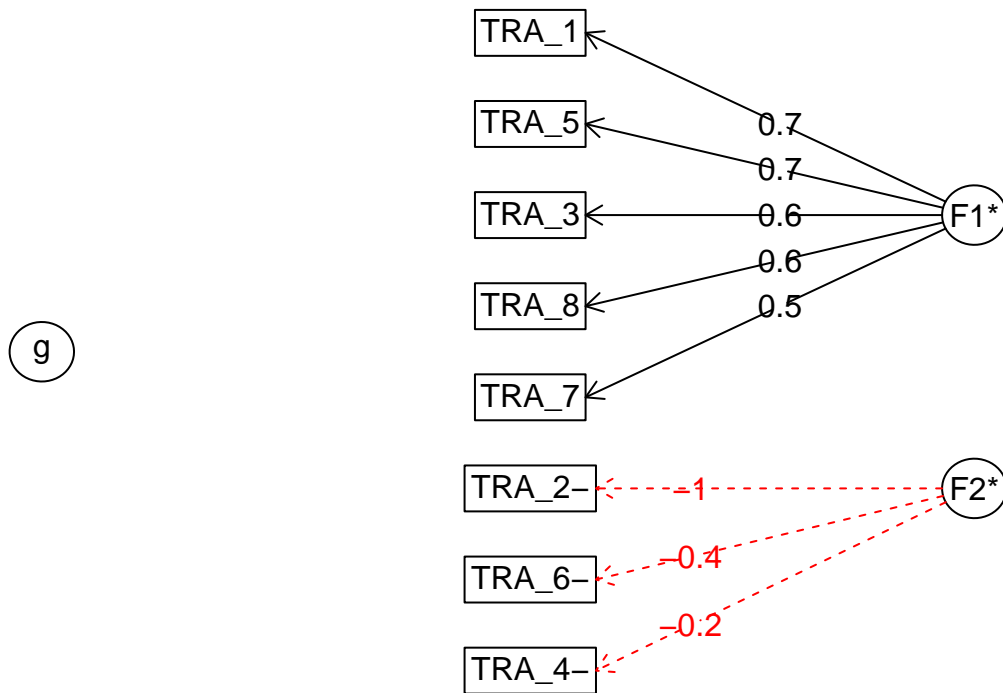


## Parallel analysis suggests that the number of factors = 3 and the number of components = 2

## EFA

```
## Factor Analysis using method = ml
## Call: fa(r = d_tmp, nfactors = 2, fm = "ml")
## Standardized loadings (pattern matrix) based upon correlation matrix
##      ML2    ML1    h2    u2 com
## TRA_1  0.69  0.07 0.476 0.524 1.0
## TRA_2 -0.01  1.00 0.995 0.005 1.0
## TRA_3  0.64 -0.06 0.413 0.587 1.0
## TRA_4  0.13  0.25 0.079 0.921 1.5
## TRA_5  0.69  0.01 0.472 0.528 1.0
## TRA_6  0.06  0.44 0.197 0.803 1.0
## TRA_7  0.47  0.08 0.223 0.777 1.1
## TRA_8  0.57 -0.12 0.339 0.661 1.1
##
##
##      ML2    ML1
## SS loadings      1.91 1.28
## Proportion Var    0.24 0.16
## Cumulative Var    0.24 0.40
## Proportion Explained 0.60 0.40
## Cumulative Proportion 0.60 1.00
##
## With factor correlations of
##      ML2    ML1
## ML2  1.00 -0.02
## ML1 -0.02  1.00
##
## Mean item complexity = 1.1
## Test of the hypothesis that 2 factors are sufficient.
##
## The degrees of freedom for the null model are 28 and the objective function was 1.43 with Chi Square = 1.43
## The degrees of freedom for the model are 13 and the objective function was 0.1
##
## The root mean square of the residuals (RMSR) is 0.04
## The df corrected root mean square of the residuals is 0.06
##
## The harmonic number of observations is 271 with the empirical chi square 28.2 with prob < 0.0086
## The total number of observations was 271 with Likelihood Chi Square = 26.5 with prob < 0.014
##
## Tucker Lewis Index of factoring reliability = 0.917
## RMSEA index = 0.063 and the 90 % confidence intervals are 0.027 0.096
## BIC = -46.3
## Fit based upon off diagonal values = 0.97
## Measures of factor score adequacy
##
##      ML2    ML1
## Correlation of (regression) scores with factors 0.88 1.00
## Multiple R square of scores with factors        0.77 0.99
## Minimum correlation of possible factor scores    0.53 0.99
```

## Omega



Implies a single dimension, as on factor 2 there is only one significant loading.

## CFA

```
## lavaan 0.6-3 ended normally after 25 iterations
##
## Optimization method          NLMINB
## Number of free parameters    10
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     12.360  10.707
## Degrees of freedom           5       5
## P-value (Chi-square)         0.030   0.058
## Scaling correction factor     1.154
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 279.937 239.185
## Degrees of freedom             10     10
## P-value                        0.000   0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)     0.973   0.975
## Tucker-Lewis Index (TLI)       0.945   0.950
##
## Robust Comparative Fit Index (CFI) 0.975
## Robust Tucker-Lewis Index (TLI) 0.951
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)    -2135.614 -2135.614
## Loglikelihood unrestricted model (H1) -2129.434 -2129.434
##
## Number of free parameters        10     10
## Akaike (AIC)                    4291.228 4291.228
## Bayesian (BIC)                   4327.250 4327.250
## Sample-size adjusted Bayesian (BIC) 4295.543 4295.543
##
## Root Mean Square Error of Approximation:
##
## RMSEA                          0.074   0.065
## 90 Percent Confidence Interval 0.021 0.127 0.006 0.115
## P-value RMSEA <= 0.05         0.186   0.262
##
## Robust RMSEA                    0.070
## 90 Percent Confidence Interval      NA 0.128
##
## Standardized Root Mean Square Residual:
##
## SRMR                          0.035   0.035
##
## Parameter Estimates:
```

```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## tra_gen =~
## TRA_1 1.000 0.920 0.691
## TRA_5 0.925 0.107 8.650 0.000 0.851 0.681
## TRA_3 0.797 0.100 8.000 0.000 0.733 0.643
## TRA_8 0.825 0.116 7.110 0.000 0.759 0.562
## TRA_7 0.707 0.109 6.477 0.000 0.650 0.463
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .TRA_1 0.925 0.130 7.132 0.000 0.925 0.522
## .TRA_5 0.837 0.114 7.370 0.000 0.837 0.536
## .TRA_3 0.764 0.094 8.098 0.000 0.764 0.587
## .TRA_8 1.247 0.136 9.146 0.000 1.247 0.684
## .TRA_7 1.548 0.125 12.363 0.000 1.548 0.785
## tra_gen 0.846 0.148 5.730 0.000 1.000 1.000

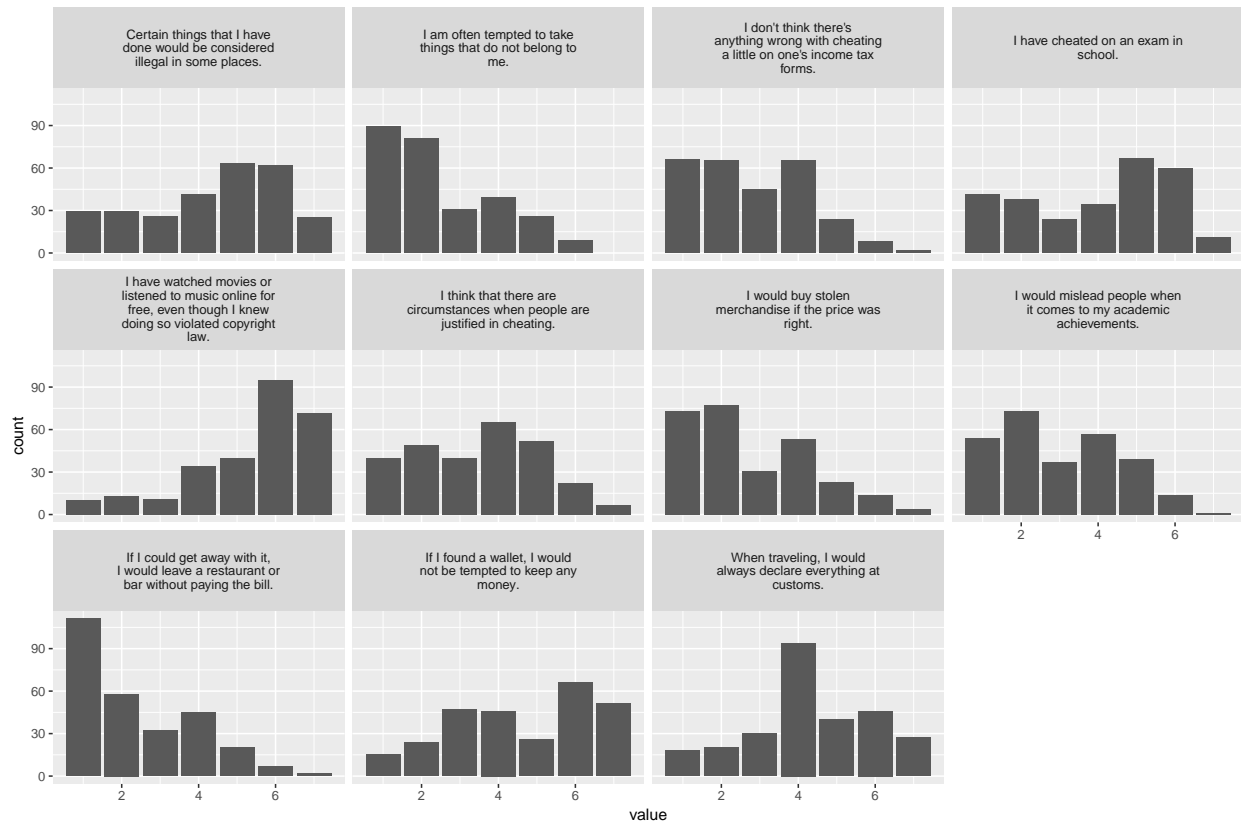
```

Shows adequate fit.



# Integrity

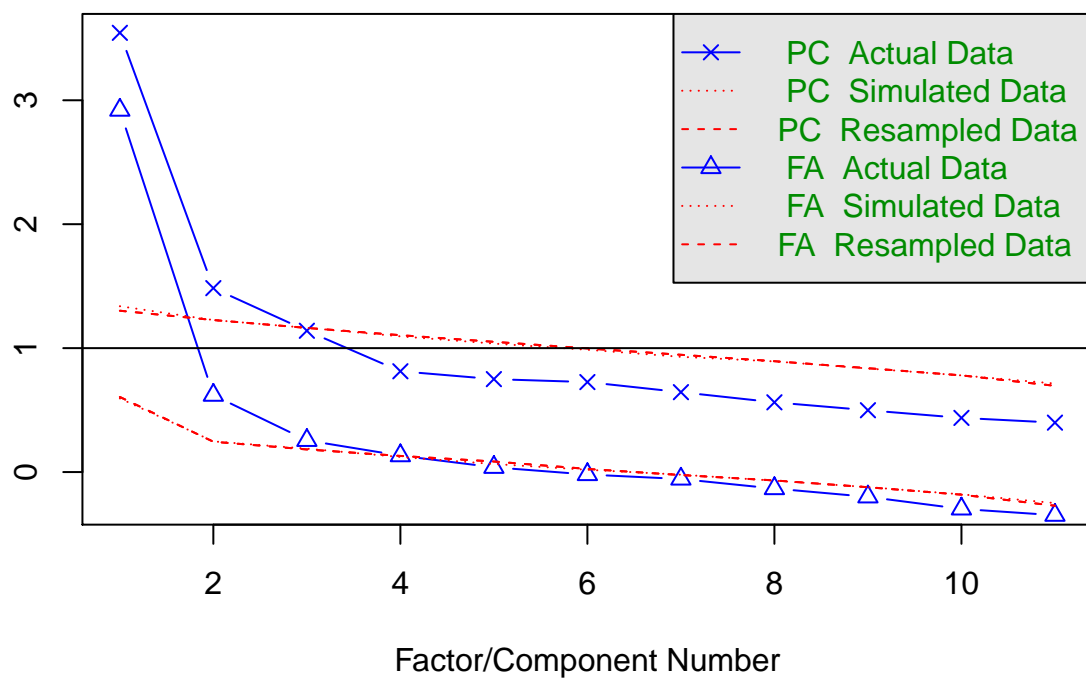
## Items



## Parallel analysis

eigenvalues of principal components and factor analysis

### Parallel Analysis Scree Plots



## Parallel analysis suggests that the number of factors = 3 and the number of components = 2

## EFA

```
## Factor Analysis using method = ml
## Call: fa(r = d_tmp, nfactors = 3, fm = "ml")
## Standardized loadings (pattern matrix) based upon correlation matrix
##      ML2    ML3    ML1    h2    u2 com
## INT_1  0.75 -0.04  0.02 0.55 0.455 1.0
## INT_2  0.58  0.07  0.04 0.38 0.619 1.0
## INT_3  0.00  0.00  1.00 1.00 0.005 1.0
## INT_4  0.22 -0.06  0.27 0.13 0.875 2.1
## INT_5  0.68 -0.08  0.01 0.42 0.577 1.0
## INT_6  0.66  0.12 -0.04 0.51 0.486 1.1
## INT_7  0.62  0.04 -0.05 0.40 0.597 1.0
## INT_8  0.32  0.36  0.05 0.34 0.663 2.0
## INT_9  0.15  0.60  0.02 0.47 0.531 1.1
## INT_10 -0.17  0.59  0.01 0.29 0.711 1.2
## INT_11  0.08  0.48 -0.11 0.29 0.713 1.2
##
##
##      ML2    ML3    ML1
## SS loadings      2.48 1.19 1.10
## Proportion Var    0.23 0.11 0.10
## Cumulative Var    0.23 0.33 0.43
## Proportion Explained 0.52 0.25 0.23
## Cumulative Proportion 0.52 0.77 1.00
##
## With factor correlations of
##      ML2    ML3    ML1
## ML2 1.00  0.46  0.05
## ML3 0.46  1.00 -0.07
## ML1 0.05 -0.07  1.00
##
## Mean item complexity = 1.2
## Test of the hypothesis that 3 factors are sufficient.
##
## The degrees of freedom for the null model are 55 and the objective function was 2.48 with Chi Squ
## The degrees of freedom for the model are 25 and the objective function was 0.16
##
## The root mean square of the residuals (RMSR) is 0.03
## The df corrected root mean square of the residuals is 0.05
##
## The harmonic number of observations is 271 with the empirical chi square 32.5 with prob < 0.14
## The total number of observations was 271 with Likelihood Chi Square = 43.3 with prob < 0.013
##
## Tucker Lewis Index of factoring reliability = 0.933
## RMSEA index = 0.054 and the 90 % confidence intervals are 0.024 0.078
## BIC = -96.8
## Fit based upon off diagonal values = 0.99
## Measures of factor score adequacy
##
##      ML2    ML3    ML1
## Correlation of (regression) scores with factors 0.91 0.82 1.00
## Multiple R square of scores with factors      0.82 0.67 1.00
## Minimum correlation of possible factor scores  0.65 0.34 0.99
```

Two factors don't really convince, as factor 3 consists of one item only. Will try two-factor solution.

```

## Factor Analysis using method = ml
## Call: fa(r = d_tmp, nfactors = 2, fm = "ml")
## Standardized loadings (pattern matrix) based upon correlation matrix
##      ML1    ML2    h2    u2 com
## INT_1  0.74 -0.03 0.537 0.46 1.0
## INT_2  0.60  0.05 0.385 0.61 1.0
## INT_3  0.17 -0.21 0.040 0.96 1.9
## INT_4  0.30 -0.16 0.073 0.93 1.5
## INT_5  0.70 -0.10 0.432 0.57 1.0
## INT_6  0.65  0.13 0.511 0.49 1.1
## INT_7  0.60  0.06 0.393 0.61 1.0
## INT_8  0.33  0.35 0.335 0.66 2.0
## INT_9  0.18  0.56 0.436 0.56 1.2
## INT_10 -0.15  0.57 0.264 0.74 1.1
## INT_11  0.04  0.53 0.307 0.69 1.0
##
##              ML1  ML2
## SS loadings      2.51 1.21
## Proportion Var    0.23 0.11
## Cumulative Var    0.23 0.34
## Proportion Explained 0.68 0.32
## Cumulative Proportion 0.68 1.00
##
## With factor correlations of
##      ML1  ML2
## ML1 1.00 0.46
## ML2 0.46 1.00
##
## Mean item complexity = 1.3
## Test of the hypothesis that 2 factors are sufficient.
##
## The degrees of freedom for the null model are 55 and the objective function was 2.48 with Chi Square
## The degrees of freedom for the model are 34 and the objective function was 0.27
##
## The root mean square of the residuals (RMSR) is 0.05
## The df corrected root mean square of the residuals is 0.06
##
## The harmonic number of observations is 271 with the empirical chi square 76.1 with prob < 4.6e-05
## The total number of observations was 271 with Likelihood Chi Square = 71.1 with prob < 2e-04
##
## Tucker Lewis Index of factoring reliability = 0.9
## RMSEA index = 0.065 and the 90 % confidence intervals are 0.043 0.084
## BIC = -119
## Fit based upon off diagonal values = 0.97
## Measures of factor score adequacy
##
##              ML1  ML2
## Correlation of (regression) scores with factors 0.91 0.82
## Multiple R square of scores with factors        0.82 0.66
## Minimum correlation of possible factor scores    0.65 0.33

```

Implies that item 3 and item 4 should be dropped.

## CFA

```
## lavaan 0.6-3 ended normally after 37 iterations
##
## Optimization method          NLMINB
## Number of free parameters    20
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     52.182  47.928
## Degrees of freedom           25      25
## P-value (Chi-square)         0.001    0.004
## Scaling correction factor     1.089
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 622.929 591.109
## Degrees of freedom              36      36
## P-value                        0.000    0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      0.954    0.959
## Tucker-Lewis Index (TLI)        0.933    0.941
##
## Robust Comparative Fit Index (CFI) 0.957
## Robust Tucker-Lewis Index (TLI)   0.939
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)    -4307.386 -4307.386
## Loglikelihood unrestricted model (H1) -4281.295 -4281.295
##
## Number of free parameters        20      20
## Akaike (AIC)                    8654.773  8654.773
## Bayesian (BIC)                   8726.815  8726.815
## Sample-size adjusted Bayesian (BIC) 8663.401  8663.401
##
## Root Mean Square Error of Approximation:
##
## RMSEA                          0.063    0.058
## 90 Percent Confidence Interval    0.039  0.088    0.034  0.082
## P-value RMSEA <= 0.05           0.169    0.265
##
## Robust RMSEA                    0.061
## 90 Percent Confidence Interval    0.034  0.086
##
## Standardized Root Mean Square Residual:
##
## SRMR                          0.045    0.045
##
## Parameter Estimates:
```

```

##
## Information Expected
## Information saturated (h1) model Structured
## Standard Errors Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## int_1 =~
## INT_1 (a) 1.000 0.558 0.385
## INT_2 (a) 1.000 0.558 0.383
## INT_5 (a) 1.000 0.558 0.373
## INT_6 (a) 1.000 0.558 0.350
## INT_7 (a) 1.000 0.558 0.362
## INT_8 (a) 1.000 0.558 0.338
## int_2 =~
## INT_8 (b) 1.000 0.696 0.422
## INT_9 (b) 1.000 0.696 0.380
## INT_10 (b) 1.000 0.696 0.448
## INT_11 (b) 1.000 0.696 0.388
## int_gen =~
## INT_1 1.000 0.874 0.603
## INT_2 0.807 0.129 6.236 0.000 0.705 0.484
## INT_5 0.873 0.140 6.220 0.000 0.763 0.509
## INT_6 1.163 0.146 7.961 0.000 1.016 0.638
## INT_7 0.943 0.126 7.497 0.000 0.824 0.534
## INT_8 0.714 0.150 4.756 0.000 0.624 0.378
## INT_9 1.150 0.283 4.069 0.000 1.005 0.549
## INT_10 0.365 0.162 2.245 0.025 0.319 0.205
## INT_11 0.731 0.214 3.407 0.001 0.638 0.356
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## int_1 ~~
## int_2 0.000 0.000 0.000
## int_gen 0.000 0.000 0.000
## int_2 ~~
## int_gen 0.000 0.000 0.000
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .INT_1 1.024 0.147 6.963 0.000 1.024 0.488
## .INT_2 1.313 0.170 7.731 0.000 1.313 0.619
## .INT_5 1.352 0.157 8.634 0.000 1.352 0.602
## .INT_6 1.196 0.185 6.474 0.000 1.196 0.471
## .INT_7 1.394 0.181 7.719 0.000 1.394 0.584
## .INT_8 1.540 0.180 8.565 0.000 1.540 0.565
## .INT_9 1.857 0.267 6.958 0.000 1.857 0.554
## .INT_10 1.828 0.189 9.675 0.000 1.828 0.757
## .INT_11 2.323 0.230 10.088 0.000 2.323 0.722
## int_1 0.312 0.167 1.864 0.062 1.000 1.000
## int_2 0.485 0.091 5.309 0.000 1.000 1.000
## int_gen 0.764 0.224 3.411 0.001 1.000 1.000

```

Bifactor model fits the data well.

## Results

```
## lavaan 0.6-3 ended normally after 49 iterations
##
##      Optimization method          NLMINB
##      Number of free parameters      67
##
##      Number of observations          271
##
##      Estimator                      ML      Robust
##      Model Fit Test Statistic        231.753    218.679
##      Degrees of freedom              137        137
##      P-value (Chi-square)            0.000        0.000
##      Scaling correction factor        1.060
##      for the Satorra-Bentler correction
##
## Model test baseline model:
##
##      Minimum Function Test Statistic    1393.228    1311.548
##      Degrees of freedom                187        187
##      P-value                          0.000        0.000
##
## User model versus baseline model:
##
##      Comparative Fit Index (CFI)        0.921        0.927
##      Tucker-Lewis Index (TLI)          0.893        0.901
##
##      Robust Comparative Fit Index (CFI)        0.928
##      Robust Tucker-Lewis Index (TLI)          0.901
##
## Loglikelihood and Information Criteria:
##
##      Loglikelihood user model (H0)        -6777.457    -6777.457
##      Loglikelihood unrestricted model (H1)    -6661.581    -6661.581
##
##      Number of free parameters            67        67
##      Akaike (AIC)                        13688.914    13688.914
##      Bayesian (BIC)                      13930.256    13930.256
##      Sample-size adjusted Bayesian (BIC)    13717.819    13717.819
##
## Root Mean Square Error of Approximation:
##
##      RMSEA                              0.051        0.047
##      90 Percent Confidence Interval        0.039    0.062        0.035    0.058
##      P-value RMSEA <= 0.05                0.456        0.665
##
##      Robust RMSEA                        0.048
##      90 Percent Confidence Interval        0.036    0.060
##
## Standardized Root Mean Square Residual:
##
##      SRMR                              0.055        0.055
##
## Parameter Estimates:
```

```

##
## Information
## Information saturated (h1) model
## Standard Errors
## Expected
## Structured
## Robust.sem
##
## Latent Variables:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov =~
## N4P.SOC_1 1.000 1.073 0.740
## N4P.SOC_2 0.993 0.091 10.956 0.000 1.065 0.719
## N4P.SOC_3 1.021 0.091 11.282 0.000 1.096 0.765
## N4P.SOC_4 1.152 0.090 12.839 0.000 1.236 0.808
## N4P.SOC_9 1.022 0.091 11.177 0.000 1.097 0.730
## pri_nee_int =~
## N4P.BOT_1 1.000 0.948 0.710
## N4P.INT_2 0.425 0.146 2.915 0.004 0.403 0.265
## N4P.INT_7 0.718 0.115 6.236 0.000 0.680 0.532
## N4P.INT_9 0.710 0.110 6.464 0.000 0.673 0.523
## pri_nee_ano =~
## N4P.SOC_6 1.000 0.905 0.595
## N4P.SOC_7 1.158 0.150 7.732 0.000 1.048 0.752
## N4P.SOC_8 0.929 0.123 7.545 0.000 0.841 0.572
## N4P.INT_2 0.668 0.136 4.903 0.000 0.605 0.397
## soc =~
## soc_gen 1.000 0.809 0.887
## fea =~
## fea_gen 1.000 0.643 0.892
## tra =~
## tra_gen 1.000 0.690 0.859
## rit =~
## rit_gen 1.000 0.649 0.884
## int =~
## int_gen 1.000 0.624 0.888
##
## Regressions:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## pri_nee_gov ~
## soc -0.226 0.108 -2.089 0.037 -0.170 -0.170
## fea -0.305 0.140 -2.186 0.029 -0.183 -0.183
## tra 0.161 0.142 1.133 0.257 0.104 0.104
## rit 0.201 0.156 1.289 0.197 0.121 0.121
## int -0.074 0.149 -0.493 0.622 -0.043 -0.043
## male 0.384 0.153 2.514 0.012 0.358 0.158
## age 0.026 0.013 1.952 0.051 0.024 0.062
## inc 0.073 0.067 1.090 0.276 0.068 0.067
## pri_nee_int ~
## soc -0.387 0.099 -3.911 0.000 -0.330 -0.330
## fea -0.001 0.122 -0.011 0.991 -0.001 -0.001
## tra 0.188 0.151 1.246 0.213 0.137 0.137
## rit 0.397 0.141 2.821 0.005 0.272 0.272
## int 0.011 0.129 0.088 0.930 0.007 0.007
## male 0.280 0.145 1.938 0.053 0.296 0.131
## age 0.017 0.013 1.259 0.208 0.018 0.045
## inc 0.032 0.080 0.405 0.686 0.034 0.034

```



```

## pri_nee_ano ~
## soc -0.221 0.094 -2.366 0.018 -0.198 -0.198
## fea -0.162 0.117 -1.383 0.167 -0.115 -0.115
## tra -0.031 0.131 -0.235 0.814 -0.023 -0.023
## rit 0.036 0.123 0.293 0.770 0.026 0.026
## int -0.405 0.134 -3.015 0.003 -0.279 -0.279
## male 0.294 0.144 2.044 0.041 0.325 0.144
## age 0.035 0.016 2.160 0.031 0.039 0.100
## inc 0.136 0.074 1.845 0.065 0.150 0.149
##
## Covariances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## soc ~~
## fea -0.137 0.041 -3.361 0.001 -0.264 -0.264
## tra -0.086 0.044 -1.952 0.051 -0.153 -0.153
## rit -0.040 0.047 -0.853 0.394 -0.076 -0.076
## int 0.044 0.041 1.073 0.283 0.087 0.087
## fea ~~
## tra 0.073 0.038 1.892 0.058 0.164 0.164
## rit 0.021 0.036 0.593 0.553 0.051 0.051
## int -0.012 0.031 -0.381 0.703 -0.030 -0.030
## tra ~~
## rit 0.179 0.040 4.523 0.000 0.400 0.400
## int -0.009 0.036 -0.260 0.795 -0.022 -0.022
## rit ~~
## int 0.118 0.030 3.909 0.000 0.291 0.291
## .pri_nee_gov ~~
## .pri_nee_int 0.258 0.081 3.183 0.001 0.319 0.319
## .pri_nee_ano 0.579 0.103 5.641 0.000 0.704 0.704
## .pri_nee_int ~~
## .pri_nee_ano 0.202 0.076 2.668 0.008 0.308 0.308
##
## Variances:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .soc_gen 0.177 0.177 0.213
## .fea_gen 0.106 0.106 0.204
## .tra_gen 0.169 0.169 0.262
## .rit_gen 0.118 0.118 0.219
## .int_gen 0.104 0.104 0.211
## .N4P.SOC_1 0.950 0.100 9.531 0.000 0.950 0.452
## .N4P.SOC_2 1.063 0.141 7.561 0.000 1.063 0.484
## .N4P.SOC_3 0.853 0.119 7.140 0.000 0.853 0.415
## .N4P.SOC_4 0.814 0.117 6.973 0.000 0.814 0.348
## .N4P.SOC_9 1.057 0.108 9.785 0.000 1.057 0.468
## .N4P.BOT_1 0.884 0.141 6.286 0.000 0.884 0.496
## .N4P.INT_2 1.639 0.155 10.563 0.000 1.639 0.706
## .N4P.INT_7 1.173 0.127 9.249 0.000 1.173 0.717
## .N4P.INT_9 1.200 0.153 7.871 0.000 1.200 0.726
## .N4P.SOC_6 1.496 0.172 8.682 0.000 1.496 0.646
## .N4P.SOC_7 0.843 0.127 6.647 0.000 0.843 0.434
## .N4P.SOC_8 1.459 0.177 8.261 0.000 1.459 0.673
## .pri_nee_gov 1.013 0.161 6.294 0.000 0.880 0.880
## .pri_nee_int 0.644 0.144 4.478 0.000 0.717 0.717
## .pri_nee_ano 0.667 0.156 4.271 0.000 0.814 0.814

```

##	soc	0.655	0.074	8.883	0.000	1.000	1.000
##	fea	0.413	0.040	10.456	0.000	1.000	1.000
##	tra	0.476	0.053	8.945	0.000	1.000	1.000
##	rit	0.422	0.061	6.909	0.000	1.000	1.000
##	int	0.389	0.036	10.843	0.000	1.000	1.000

# Tables

## Items measuring need for privacy

name	included	content
N4P.SOC_1	yes	I need government agencies to respect my privacy, even if that hinders a greater societal cause.
N4P.SOC_2	yes	I need the information that companies (e.g., Amazon, Facebook, or Google) have about me to stay private so that the government can never access it.
N4P.SOC_3	yes	I don't want the government to gather information about me, even if that makes it more difficult for them to spend tax income efficiently.
N4P.SOC_4	yes	I don't want government agencies to monitor my personal communication, even if doing so prevents future terrorist attacks.
N4P.SOC_5	no	I need to be able to surf online anonymously.
N4P.SOC_6	yes	I need to be able to use a fake name on social network sites to preserve my privacy.
N4P.SOC_7	yes	I feel the need to avoid places with video surveillance.
N4P.SOC_8	yes	I prefer not to carry my ID with me all the time to preserve my privacy.
N4P.SOC_9	yes	I feel the need to protect my privacy from government agencies.
N4P.INT_1	no	I feel the need to disclose personal information about me on social network sites.
N4P.INT_2	yes	My need for privacy is so strong that it prevents me from using Facebook actively.
N4P.INT_3	no	I don't feel the need to be able to communicate about very personal things with others online.
N4P.INT_4	no	I need to know that my boss or future employers cannot find information about me online that they might disapprove of.
N4P.INT_5	no	I always need a person to talk about personal things.
N4P.INT_6	no	I don't need to know a lot of things about people I interact with, as that might cause problems.
N4P.INT_7	yes	I don't feel the need to tell my friends all my secrets.
N4P.INT_8	no	I sometimes feel the need to share my personal point of view with someone I don't know that well.
N4P.INT_9	yes	I feel the need to protect my privacy from other people.
N4P.BOT_1	yes	I prefer it when other people do not know much about me.
N4P.BOT_2	no	When given the chance, I prefer being incognito.
N4P.BOT_3	no	I don't want personal information about me being publicly available.
N4P.BOT_4	no	Not everybody needs to know everything about me.

## Psychometrics

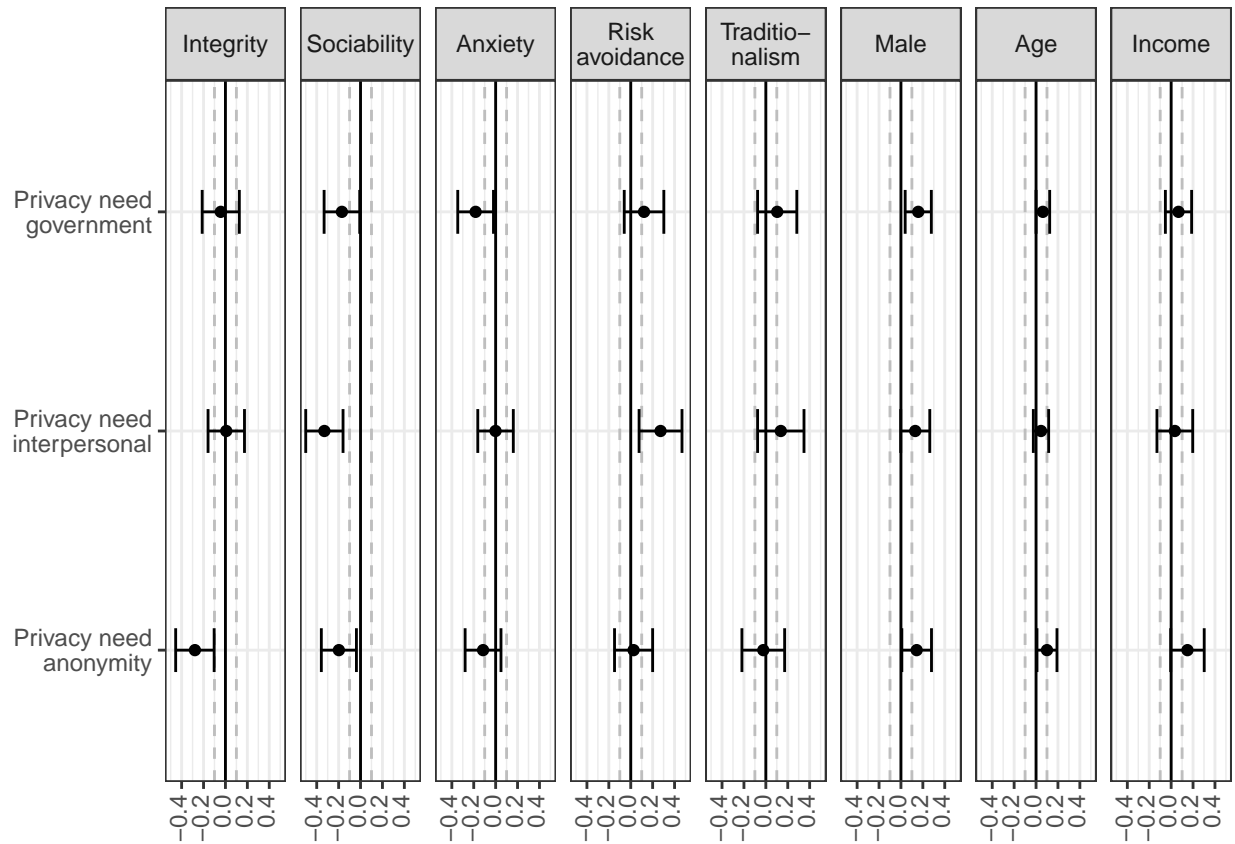
	m	sd	chisq	df	pvalue	cfi	tli	rmsea	srmr	omega	alpha	ave
(Combined)	4.17	1.62	97.74	50	< .001	.95	.93	.06	.06	.84	.88	.46
Government	4.12	1.49	6.39	5	.270	1.00	.99	.03	.02	.87	.87	.57
Interpersonal	4.21	1.59	10.61	2	.005	.92	.76	.13	.05	.61	.62	.30
Anonymity	2.90	1.50	3.11	2	.212	.99	.98	.05	.03	.69	.69	.36
Sociability	4.70	1.50	5.94	2	.051	.98	.95	.09	.03	.79	.79	.49
Anxiety	4.42	1.52	38.05	18	.004	.95	.93	.06	.04	.80	.82	.41
Risk aversion	4.32	1.55	5.16	5	.397	1.00	1.00	.01	.02	.78	.78	.42
Traditionality	3.90	1.60	10.71	5	.058	.98	.95	.06	.03	.74	.74	.37
Integrity	4.56	1.83	47.93	25	.004	.96	.94	.06	.04	.79	.82	.40

## Results

Outcome	Predictor	b	ll	ul	beta	p
Privacy need government	Sociability	-0.23	-0.44	-0.01	-.17	.037
Privacy need government	Anxiety	-0.31	-0.58	-0.03	-.18	.029
Privacy need government	Traditionalism	0.16	-0.12	0.44	.10	.257
Privacy need government	Risk avoidance	0.20	-0.10	0.51	.12	.197
Privacy need government	Integrity	-0.07	-0.37	0.22	-.04	.622
Privacy need government	Male	0.38	0.08	0.68	.16	.012
Privacy need government	Age	0.03	> -0.01	0.05	.06	.051
Privacy need government	Income	0.07	-0.06	0.20	.07	.276
Privacy need interpersonal	Sociability	-0.39	-0.58	-0.19	-.33	< .001
Privacy need interpersonal	Anxiety	> -0.01	-0.24	0.24	> -.01	.991
Privacy need interpersonal	Traditionalism	0.19	-0.11	0.48	.14	.213
Privacy need interpersonal	Risk avoidance	0.40	0.12	0.67	.27	.005
Privacy need interpersonal	Integrity	0.01	-0.24	0.26	.01	.930
Privacy need interpersonal	Male	0.28	> -0.01	0.56	.13	.053
Privacy need interpersonal	Age	0.02	-0.01	0.04	.05	.208
Privacy need interpersonal	Income	0.03	-0.12	0.19	.03	.686
Privacy need anonymity	Sociability	-0.22	-0.40	-0.04	-.20	.018
Privacy need anonymity	Anxiety	-0.16	-0.39	0.07	-.11	.167
Privacy need anonymity	Traditionalism	-0.03	-0.29	0.23	-.02	.814
Privacy need anonymity	Risk avoidance	0.04	-0.21	0.28	.03	.770
Privacy need anonymity	Integrity	-0.40	-0.67	-0.14	-.28	.003
Privacy need anonymity	Male	0.29	0.01	0.58	.14	.041
Privacy need anonymity	Age	0.03	< 0.01	0.07	.10	.031
Privacy need anonymity	Income	0.14	-0.01	0.28	.15	.065

# Figures

## Results



## Additional analyses

### Bi-Factor

```
## lavaan 0.6-3 ended normally after 99 iterations
##
## Optimization method          NLMINB
## Number of free parameters      84
##
## Number of observations        271
##
## Estimator                     ML      Robust
## Model Fit Test Statistic      180.457  169.888
## Degrees of freedom            120      120
## P-value (Chi-square)          0.000    0.002
## Scaling correction factor      1.062
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 1393.228 1311.548
## Degrees of freedom             187      187
## P-value                        0.000    0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      0.950    0.956
## Tucker-Lewis Index (TLI)        0.922    0.931
##
## Robust Comparative Fit Index (CFI) 0.956
## Robust Tucker-Lewis Index (TLI)  0.931
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)    -6751.809 -6751.809
## Loglikelihood unrestricted model (H1) -6661.581 -6661.581
##
## Number of free parameters        84      84
## Akaike (AIC)                    13671.618 13671.618
## Bayesian (BIC)                   13974.196 13974.196
## Sample-size adjusted Bayesian (BIC) 13707.857 13707.857
##
## Root Mean Square Error of Approximation:
##
## RMSEA                          0.043    0.039
## 90 Percent Confidence Interval    0.029  0.056    0.025  0.052
## P-value RMSEA <= 0.05            0.808    0.919
##
## Robust RMSEA                    0.040
## 90 Percent Confidence Interval    0.025  0.054
##
## Standardized Root Mean Square Residual:
##
```

```

##      SRMR                                0.045      0.045
##
## Parameter Estimates:
##
##      Information                                Expected
##      Information saturated (h1) model          Structured
##      Standard Errors                          Robust.sem
##
## Latent Variables:
##      Estimate  Std.Err  z-value  P(>|z|)  Std.lv  Std.all
##      pri_nee_gen =~
##      N4P.SOC_1      1.000
##      N4P.SOC_2      1.155    0.130    8.913    0.000    0.972    0.655
##      N4P.SOC_3      1.118    0.116    9.618    0.000    0.941    0.656
##      N4P.SOC_4      1.127    0.113    9.935    0.000    0.948    0.621
##      N4P.SOC_9      1.308    0.148    8.809    0.000    1.100    0.729
##      N4P.BOT_1      0.388    0.127    3.061    0.002    0.326    0.244
##      N4P.INT_2      0.844    0.173    4.880    0.000    0.710    0.465
##      N4P.INT_7      0.026    0.127    0.206    0.837    0.022    0.017
##      N4P.INT_9      0.626    0.128    4.874    0.000    0.527    0.409
##      N4P.SOC_6      1.010    0.182    5.552    0.000    0.850    0.558
##      N4P.SOC_7      0.971    0.201    4.826    0.000    0.817    0.588
##      N4P.SOC_8      0.900    0.174    5.175    0.000    0.757    0.514
##      pri_nee_gov =~
##      N4P.SOC_1      1.000
##      N4P.SOC_2      0.731    0.152    4.804    0.000    0.605    0.408
##      N4P.SOC_3      0.865    0.141    6.129    0.000    0.716    0.499
##      N4P.SOC_4      1.218    0.157    7.769    0.000    1.008    0.660
##      N4P.SOC_9      0.606    0.163    3.709    0.000    0.502    0.332
##      pri_nee_int =~
##      N4P.BOT_1      1.000
##      N4P.INT_2      0.379    0.147    2.570    0.010    0.321    0.210
##      N4P.INT_7      0.953    0.169    5.634    0.000    0.808    0.632
##      N4P.INT_9      0.562    0.123    4.568    0.000    0.477    0.370
##      pri_nee_ano =~
##      N4P.SOC_6      1.000
##      N4P.SOC_7      2.078    0.734    2.830    0.005    0.836    0.602
##      N4P.SOC_8      1.191    0.444    2.683    0.007    0.479    0.325
##      N4P.INT_2      0.775    0.375    2.068    0.039    0.312    0.204
##      int =~
##      int_gen      1.000
##      soc =~
##      soc_gen      1.000
##      fea =~
##      fea_gen      1.000
##      tra =~
##      tra_gen      1.000
##      rit =~
##      rit_gen      1.000
##
## Regressions:
##      Estimate  Std.Err  z-value  P(>|z|)  Std.lv  Std.all
##      pri_nee_gen ~
##      int      -0.141    0.163   -0.868    0.385   -0.105   -0.105

```



```

##      soc      -0.125    0.115   -1.084    0.279   -0.120   -0.120
##      fea      0.156    0.165    0.942    0.346    0.119    0.119
##      tra     -0.330    0.203   -1.626    0.104   -0.270   -0.270
##      rit      0.400    0.188    2.132    0.033    0.309    0.309
##      male     0.298    0.187    1.596    0.111    0.354    0.156
##      age      0.048    0.023    2.143    0.032    0.058    0.149
##      inc      0.087    0.078    1.119    0.263    0.104    0.103
## pri_nee_gov ~
##      int      0.089    0.182    0.487    0.626    0.067    0.067
##      soc     -0.102    0.139   -0.738    0.460   -0.100   -0.100
##      fea     -0.538    0.197   -2.737    0.006   -0.418   -0.418
##      tra      0.598    0.255    2.350    0.019    0.499    0.499
##      rit     -0.279    0.193   -1.443    0.149   -0.218   -0.218
##      male     0.057    0.216    0.265    0.791    0.069    0.030
##      age     -0.029    0.025   -1.183    0.237   -0.035   -0.091
##      inc     -0.022    0.083   -0.266    0.790   -0.027   -0.027
## pri_nee_int ~
##      int      0.070    0.128    0.548    0.584    0.052    0.052
##      soc     -0.319    0.094   -3.416    0.001   -0.305   -0.305
##      fea     -0.073    0.118   -0.619    0.536   -0.055   -0.055
##      tra      0.300    0.154    1.950    0.051    0.244    0.244
##      rit      0.245    0.150    1.631    0.103    0.188    0.188
##      male     0.153    0.143    1.071    0.284    0.181    0.080
##      age     -0.004    0.012   -0.354    0.724   -0.005   -0.013
##      inc     -0.013    0.070   -0.184    0.854   -0.015   -0.015
## pri_nee_ano ~
##      int     -0.181    0.108   -1.680    0.093   -0.281   -0.281
##      soc     -0.071    0.072   -0.990    0.322   -0.144   -0.144
##      fea     -0.210    0.126   -1.673    0.094   -0.336   -0.336
##      tra      0.183    0.138    1.327    0.185    0.314    0.314
##      rit     -0.224    0.140   -1.596    0.111   -0.361   -0.361
##      male     0.031    0.109    0.289    0.773    0.078    0.035
##      age     -0.007    0.011   -0.643    0.520   -0.017   -0.044
##      inc      0.035    0.053    0.666    0.505    0.087    0.086
##
## Covariances:
##      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .pri_nee_gen ~~
## .pri_nee_gov      0.000
## .pri_nee_int      0.000
## .pri_nee_ano      0.000
## .pri_nee_gov ~~
## .pri_nee_int      0.000
## .pri_nee_ano      0.000
## .pri_nee_int ~~
## .pri_nee_ano      0.000
## int ~~
##      soc      0.044    0.041    1.075    0.282    0.087    0.087
##      fea     -0.012    0.031   -0.383    0.701   -0.030   -0.030
##      tra     -0.009    0.036   -0.258    0.796   -0.022   -0.022
##      rit      0.118    0.030    3.906    0.000    0.291    0.291
## soc ~~
##      fea     -0.137    0.041   -3.358    0.001   -0.263   -0.263
##      tra     -0.086    0.044   -1.953    0.051   -0.154   -0.154

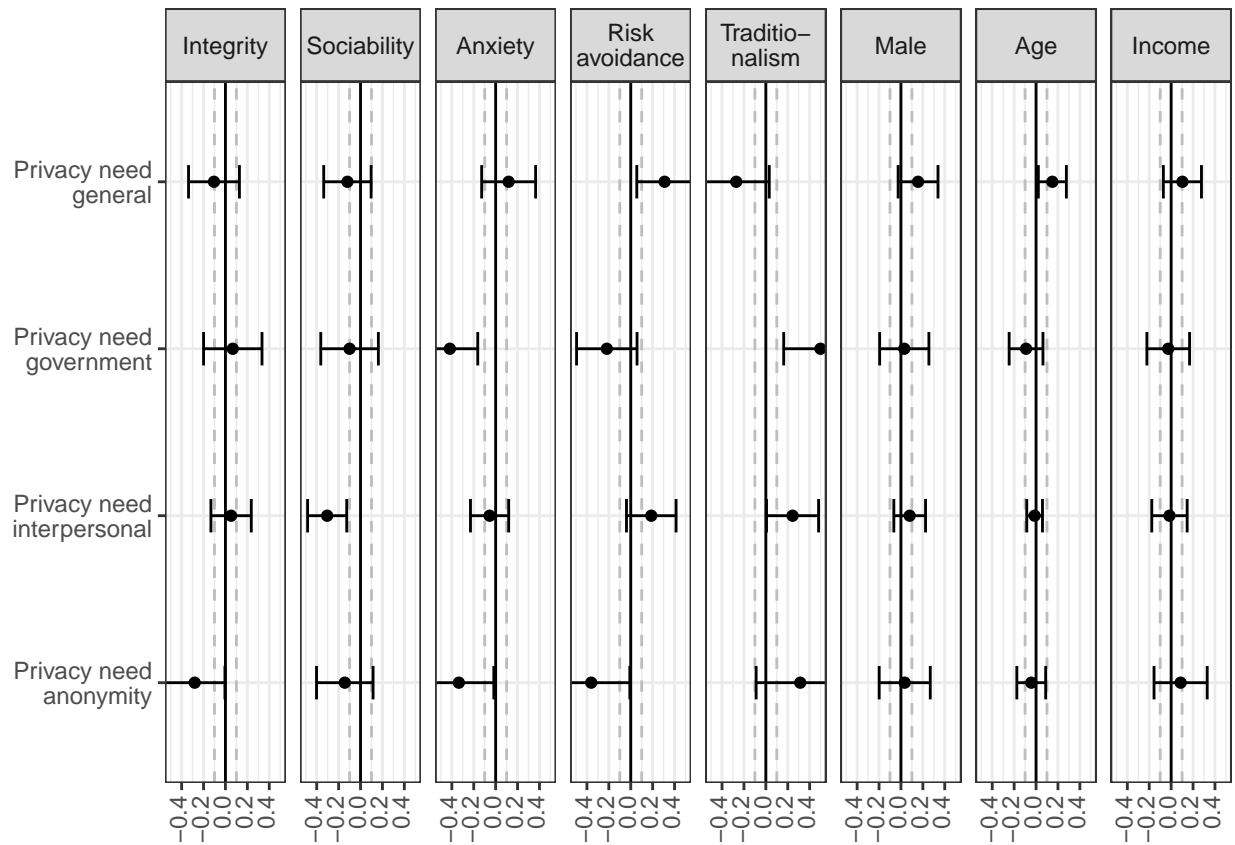
```

```

##      rit      -0.040    0.047   -0.852    0.394   -0.076   -0.076
##    fea ~~
##      tra      0.073    0.038    1.895    0.058    0.164    0.164
##      rit      0.021    0.036    0.586    0.558    0.051    0.051
##    tra ~~
##      rit      0.180    0.040    4.532    0.000    0.401    0.401
##
## Variances:
##      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
##    .int_gen    0.104
##    .soc_gen    0.177
##    .fea_gen    0.106
##    .tra_gen    0.169
##    .rit_gen    0.118
##    .N4P.SOC_1  0.911    0.108    8.440    0.000    0.911    0.434
##    .N4P.SOC_2  1.068    0.132    8.094    0.000    1.068    0.484
##    .N4P.SOC_3  0.858    0.118    7.292    0.000    0.858    0.417
##    .N4P.SOC_4  0.701    0.128    5.469    0.000    0.701    0.300
##    .N4P.SOC_9  0.977    0.114    8.608    0.000    0.977    0.429
##    .N4P.BOT_1  0.925    0.143    6.472    0.000    0.925    0.519
##    .N4P.INT_2  1.646    0.154   10.704    0.000    1.646    0.707
##    .N4P.INT_7  0.978    0.144    6.805    0.000    0.978    0.599
##    .N4P.INT_9  1.126    0.139    8.118    0.000    1.126    0.679
##    .N4P.SOC_6  1.512    0.165    9.156    0.000    1.512    0.651
##    .N4P.SOC_7  0.710    0.192    3.693    0.000    0.710    0.367
##    .N4P.SOC_8  1.444    0.171    8.423    0.000    1.444    0.666
##    .pri_nee_gen 0.572    0.155    3.700    0.000    0.808    0.808
##    .pri_nee_gov 0.460    0.153    3.001    0.003    0.671    0.671
##    .pri_nee_int 0.535    0.132    4.051    0.000    0.744    0.744
##    .pri_nee_ano 0.100    0.072    1.393    0.164    0.618    0.618
##    int         0.389    0.036   10.843    0.000    1.000    1.000
##    soc         0.655    0.074    8.884    0.000    1.000    1.000
##    fea         0.413    0.040   10.454    0.000    1.000    1.000
##    tra         0.476    0.053    8.957    0.000    1.000    1.000
##    rit         0.421    0.061    6.903    0.000    1.000    1.000
##
## R-Square:
##      Estimate
##    int_gen    0.789
##    soc_gen    0.787
##    fea_gen    0.796
##    tra_gen    0.738
##    rit_gen    0.781
##    N4P.SOC_1  0.566
##    N4P.SOC_2  0.516
##    N4P.SOC_3  0.583
##    N4P.SOC_4  0.700
##    N4P.SOC_9  0.571
##    N4P.BOT_1  0.481
##    N4P.INT_2  0.293
##    N4P.INT_7  0.401
##    N4P.INT_9  0.321
##    N4P.SOC_6  0.349
##    N4P.SOC_7  0.633

```

##	N4P.SOC_8	0.334
##	pri_nee_gen	0.192
##	pri_nee_gov	0.329
##	pri_nee_int	0.256
##	pri_nee_ano	0.382



## Individual items

```
## lavaan 0.6-3 ended normally after 126 iterations
##
## Optimization method          NLMINB
## Number of free parameters    465
##
## Number of observations       271
##
## Estimator                    ML      Robust
## Model Fit Test Statistic     0.000    0.000
## Degrees of freedom           0        0
## Minimum Function Value       0.000000000000
## Scaling correction factor          NA
##   for the Satorra-Bentler correction
##
## Model test baseline model:
##
## Minimum Function Test Statistic 2421.261 2110.595
## Degrees of freedom             435    435
## P-value                        0.000    0.000
##
## User model versus baseline model:
##
## Comparative Fit Index (CFI)      1.000    1.000
## Tucker-Lewis Index (TLI)        1.000    1.000
##
## Robust Comparative Fit Index (CFI)      NA
## Robust Tucker-Lewis Index (TLI)        NA
##
## Loglikelihood and Information Criteria:
##
## Loglikelihood user model (H0)      -11987.491 -11987.491
## Loglikelihood unrestricted model (H1) -11987.491 -11987.491
##
## Number of free parameters          465    465
## Akaike (AIC)                      24904.982 24904.982
## Bayesian (BIC)                    26579.968 26579.968
## Sample-size adjusted Bayesian (BIC) 25105.592 25105.592
##
## Root Mean Square Error of Approximation:
##
## RMSEA                            0.000    0.000
## 90 Percent Confidence Interval    0.000 0.000    0.000 0.000
## P-value RMSEA <= 0.05            NA      NA
##
## Robust RMSEA                      0.000
## 90 Percent Confidence Interval    0.000 0.000
##
## Standardized Root Mean Square Residual:
##
## SRMR                            0.000    0.000
##
## Parameter Estimates:
```

```

##
## Information
## Information saturated (h1) model
## Standard Errors
## Expected
## Structured
## Robust.sem
##
## Regressions:
## Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## N4P.BOT_1 ~
## int_gen -0.101 0.115 -0.881 0.378 -0.101 -0.053
## soc_gen -0.359 0.085 -4.207 0.000 -0.359 -0.245
## fea_gen -0.019 0.110 -0.174 0.862 -0.019 -0.010
## tra_gen 0.208 0.114 1.830 0.067 0.208 0.125
## rit_gen 0.317 0.112 2.845 0.004 0.317 0.175
## male 0.213 0.171 1.246 0.213 0.213 0.071
## age 0.007 0.016 0.458 0.647 0.007 0.014
## inc 0.116 0.081 1.444 0.149 0.116 0.087
## N4P.BOT_2 ~
## int_gen -0.006 0.124 -0.051 0.959 -0.006 -0.003
## soc_gen -0.323 0.092 -3.510 0.000 -0.323 -0.214
## fea_gen 0.086 0.126 0.681 0.496 0.086 0.045
## tra_gen 0.123 0.126 0.976 0.329 0.123 0.072
## rit_gen 0.152 0.114 1.338 0.181 0.152 0.081
## male 0.617 0.196 3.154 0.002 0.617 0.198
## age 0.025 0.018 1.362 0.173 0.025 0.047
## inc -0.026 0.087 -0.299 0.765 -0.026 -0.019
## N4P.BOT_3 ~
## int_gen 0.386 0.100 3.870 0.000 0.386 0.240
## soc_gen 0.052 0.078 0.675 0.500 0.052 0.042
## fea_gen 0.141 0.099 1.430 0.153 0.141 0.090
## tra_gen 0.111 0.095 1.158 0.247 0.111 0.079
## rit_gen 0.185 0.097 1.912 0.056 0.185 0.120
## male 0.129 0.152 0.845 0.398 0.129 0.050
## age 0.018 0.021 0.875 0.382 0.018 0.042
## inc -0.069 0.079 -0.874 0.382 -0.069 -0.061
## N4P.BOT_4 ~
## int_gen 0.168 0.083 2.033 0.042 0.168 0.112
## soc_gen 0.154 0.080 1.926 0.054 0.154 0.133
## fea_gen 0.142 0.080 1.787 0.074 0.142 0.097
## tra_gen 0.227 0.084 2.693 0.007 0.227 0.173
## rit_gen 0.204 0.087 2.356 0.018 0.204 0.142
## male 0.091 0.141 0.646 0.518 0.091 0.038
## age -0.015 0.015 -1.048 0.295 -0.015 -0.038
## inc -0.048 0.068 -0.700 0.484 -0.048 -0.045
## N4P.SOC_1 ~
## int_gen -0.009 0.133 -0.066 0.947 -0.009 -0.004
## soc_gen -0.146 0.101 -1.436 0.151 -0.146 -0.091
## fea_gen -0.272 0.142 -1.917 0.055 -0.272 -0.135
## tra_gen 0.182 0.128 1.425 0.154 0.182 0.101
## rit_gen 0.158 0.120 1.324 0.185 0.158 0.080
## male 0.246 0.201 1.224 0.221 0.246 0.075
## age 0.016 0.020 0.779 0.436 0.016 0.028
## inc 0.058 0.083 0.698 0.485 0.058 0.040
## N4P.SOC_2 ~
## int_gen 0.008 0.139 0.056 0.955 0.008 0.004

```

##	soc_gen	-0.126	0.100	-1.254	0.210	-0.126	-0.077
##	fea_gen	0.013	0.149	0.088	0.930	0.013	0.006
##	tra_gen	0.190	0.117	1.627	0.104	0.190	0.102
##	rit_gen	0.237	0.139	1.713	0.087	0.237	0.117
##	male	0.481	0.196	2.450	0.014	0.481	0.143
##	age	0.015	0.023	0.646	0.518	0.015	0.026
##	inc	0.074	0.090	0.821	0.411	0.074	0.049
##	N4P.SOC_3 ~						
##	int_gen	-0.046	0.136	-0.337	0.736	-0.046	-0.022
##	soc_gen	-0.257	0.099	-2.592	0.010	-0.257	-0.163
##	fea_gen	-0.270	0.132	-2.046	0.041	-0.270	-0.135
##	tra_gen	0.209	0.124	1.691	0.091	0.209	0.117
##	rit_gen	0.108	0.131	0.822	0.411	0.108	0.055
##	male	0.413	0.189	2.181	0.029	0.413	0.127
##	age	0.032	0.018	1.793	0.073	0.032	0.057
##	inc	0.059	0.095	0.619	0.536	0.059	0.041
##	N4P.SOC_4 ~						
##	int_gen	-0.081	0.144	-0.561	0.575	-0.081	-0.037
##	soc_gen	-0.185	0.109	-1.698	0.090	-0.185	-0.110
##	fea_gen	-0.319	0.142	-2.248	0.025	-0.319	-0.150
##	tra_gen	0.209	0.130	1.609	0.108	0.209	0.109
##	rit_gen	0.108	0.131	0.820	0.412	0.108	0.051
##	male	0.408	0.210	1.941	0.052	0.408	0.117
##	age	0.029	0.016	1.741	0.082	0.029	0.048
##	inc	0.096	0.093	1.033	0.302	0.096	0.062
##	N4P.SOC_5 ~						
##	int_gen	0.001	0.140	0.007	0.994	0.001	0.000
##	soc_gen	-0.133	0.110	-1.204	0.229	-0.133	-0.076
##	fea_gen	-0.199	0.150	-1.333	0.183	-0.199	-0.091
##	tra_gen	0.110	0.132	0.836	0.403	0.110	0.056
##	rit_gen	0.112	0.162	0.695	0.487	0.112	0.052
##	male	0.531	0.231	2.302	0.021	0.531	0.148
##	age	0.043	0.023	1.851	0.064	0.043	0.070
##	inc	-0.057	0.093	-0.615	0.538	-0.057	-0.036
##	N4P.SOC_6 ~						
##	int_gen	-0.281	0.139	-2.028	0.043	-0.281	-0.129
##	soc_gen	-0.106	0.107	-0.988	0.323	-0.106	-0.063
##	fea_gen	-0.018	0.139	-0.131	0.896	-0.018	-0.009
##	tra_gen	0.011	0.125	0.085	0.933	0.011	0.006
##	rit_gen	0.035	0.130	0.273	0.785	0.035	0.017
##	male	0.103	0.202	0.509	0.611	0.103	0.030
##	age	0.051	0.021	2.419	0.016	0.051	0.086
##	inc	0.171	0.110	1.547	0.122	0.171	0.111
##	N4P.SOC_7 ~						
##	int_gen	-0.392	0.125	-3.138	0.002	-0.392	-0.197
##	soc_gen	-0.189	0.088	-2.147	0.032	-0.189	-0.124
##	fea_gen	-0.208	0.133	-1.570	0.117	-0.208	-0.107
##	tra_gen	0.031	0.110	0.284	0.776	0.031	0.018
##	rit_gen	-0.074	0.111	-0.667	0.505	-0.074	-0.039
##	male	0.419	0.208	2.010	0.044	0.419	0.132
##	age	0.031	0.018	1.696	0.090	0.031	0.057
##	inc	0.146	0.091	1.614	0.106	0.146	0.104
##	N4P.SOC_8 ~						
##	int_gen	-0.360	0.128	-2.818	0.005	-0.360	-0.171

##	soc_gen	-0.269	0.103	-2.618	0.009	-0.269	-0.166
##	fea_gen	-0.070	0.123	-0.573	0.567	-0.070	-0.034
##	tra_gen	-0.030	0.124	-0.243	0.808	-0.030	-0.016
##	rit_gen	0.201	0.112	1.799	0.072	0.201	0.100
##	male	0.097	0.198	0.489	0.625	0.097	0.029
##	age	0.049	0.020	2.390	0.017	0.049	0.086
##	inc	0.173	0.097	1.786	0.074	0.173	0.117
##	N4P.SOC_9 ~						
##	int_gen	-0.142	0.138	-1.029	0.303	-0.142	-0.066
##	soc_gen	-0.154	0.110	-1.399	0.162	-0.154	-0.093
##	fea_gen	-0.247	0.157	-1.580	0.114	-0.247	-0.118
##	tra_gen	-0.180	0.130	-1.384	0.166	-0.180	-0.096
##	rit_gen	0.297	0.138	2.158	0.031	0.297	0.144
##	male	0.469	0.219	2.146	0.032	0.469	0.137
##	age	0.043	0.021	2.035	0.042	0.043	0.073
##	inc	0.088	0.088	0.997	0.319	0.088	0.058
##	N4P.INT_1 ~						
##	int_gen	0.241	0.134	1.797	0.072	0.241	0.117
##	soc_gen	-0.067	0.102	-0.657	0.511	-0.067	-0.042
##	fea_gen	-0.186	0.134	-1.390	0.164	-0.186	-0.093
##	tra_gen	-0.015	0.121	-0.126	0.900	-0.015	-0.008
##	rit_gen	0.316	0.131	2.409	0.016	0.316	0.160
##	male	-0.213	0.209	-1.018	0.309	-0.213	-0.065
##	age	-0.042	0.028	-1.493	0.135	-0.042	-0.075
##	inc	-0.086	0.094	-0.923	0.356	-0.086	-0.059
##	N4P.INT_2 ~						
##	int_gen	-0.057	0.142	-0.404	0.686	-0.057	-0.026
##	soc_gen	-0.206	0.100	-2.069	0.039	-0.206	-0.123
##	fea_gen	-0.028	0.145	-0.190	0.850	-0.028	-0.013
##	tra_gen	-0.088	0.127	-0.689	0.491	-0.088	-0.046
##	rit_gen	0.043	0.128	0.338	0.735	0.043	0.021
##	male	0.642	0.213	3.010	0.003	0.642	0.186
##	age	0.011	0.032	0.348	0.728	0.011	0.019
##	inc	0.011	0.092	0.117	0.907	0.011	0.007
##	N4P.INT_3 ~						
##	int_gen	0.211	0.121	1.741	0.082	0.211	0.102
##	soc_gen	-0.169	0.097	-1.736	0.082	-0.169	-0.106
##	fea_gen	-0.127	0.128	-0.995	0.320	-0.127	-0.063
##	tra_gen	0.213	0.119	1.795	0.073	0.213	0.118
##	rit_gen	0.374	0.124	3.012	0.003	0.374	0.189
##	male	-0.011	0.188	-0.060	0.952	-0.011	-0.003
##	age	0.030	0.018	1.679	0.093	0.030	0.054
##	inc	-0.009	0.096	-0.093	0.926	-0.009	-0.006
##	N4P.INT_4 ~						
##	int_gen	-0.213	0.112	-1.893	0.058	-0.213	-0.112
##	soc_gen	0.070	0.080	0.872	0.383	0.070	0.048
##	fea_gen	0.264	0.116	2.282	0.023	0.264	0.143
##	tra_gen	0.284	0.114	2.496	0.013	0.284	0.171
##	rit_gen	0.155	0.108	1.434	0.152	0.155	0.086
##	male	-0.237	0.172	-1.377	0.168	-0.237	-0.079
##	age	0.024	0.032	0.757	0.449	0.024	0.047
##	inc	0.174	0.067	2.604	0.009	0.174	0.130
##	N4P.INT_5 ~						
##	int_gen	0.174	0.129	1.349	0.177	0.174	0.085



```

##      soc_gen      -0.206    0.094   -2.186    0.029   -0.206   -0.130
##      fea_gen      -0.163    0.147   -1.116    0.265   -0.163   -0.082
##      tra_gen      -0.226    0.123   -1.838    0.066   -0.226   -0.126
##      rit_gen      -0.098    0.139   -0.705    0.481   -0.098   -0.050
##      male         0.724    0.206    3.514    0.000    0.724    0.222
##      age          0.005    0.021    0.214    0.830    0.005    0.008
##      inc          -0.134    0.080   -1.669    0.095   -0.134   -0.092
## N4P.INT_6 ~
##      int_gen      -0.096    0.116   -0.831    0.406   -0.096   -0.052
##      soc_gen      -0.269    0.095   -2.841    0.004   -0.269   -0.188
##      fea_gen       0.129    0.123    1.048    0.295    0.129    0.071
##      tra_gen       0.085    0.107    0.792    0.428    0.085    0.052
##      rit_gen      -0.074    0.128   -0.578    0.563   -0.074   -0.042
##      male         0.635    0.181    3.513    0.000    0.635    0.215
##      age          0.033    0.030    1.105    0.269    0.033    0.066
##      inc          0.081    0.079    1.028    0.304    0.081    0.062
## N4P.INT_7 ~
##      int_gen       0.102    0.108    0.947    0.343    0.102    0.056
##      soc_gen      -0.204    0.085   -2.392    0.017   -0.204   -0.145
##      fea_gen      -0.070    0.118   -0.595    0.552   -0.070   -0.039
##      tra_gen       0.191    0.118    1.619    0.105    0.191    0.120
##      rit_gen       0.250    0.115    2.173    0.030    0.250    0.143
##      male         0.150    0.174    0.859    0.391    0.150    0.052
##      age          -0.002    0.015   -0.150    0.881   -0.002   -0.005
##      inc          -0.078    0.088   -0.880    0.379   -0.078   -0.060
## N4P.INT_8 ~
##      int_gen       0.263    0.135    1.951    0.051    0.263    0.129
##      soc_gen      -0.112    0.093   -1.211    0.226   -0.112   -0.072
##      fea_gen      -0.057    0.133   -0.430    0.667   -0.057   -0.029
##      tra_gen       0.185    0.125    1.484    0.138    0.185    0.104
##      rit_gen       0.117    0.133    0.881    0.378    0.117    0.060
##      male        -0.243    0.206   -1.182    0.237   -0.243   -0.075
##      age          -0.045    0.020   -2.228    0.026   -0.045   -0.081
##      inc          -0.066    0.090   -0.742    0.458   -0.066   -0.046
## N4P.INT_9 ~
##      int_gen       0.094    0.109    0.861    0.389    0.094    0.051
##      soc_gen      -0.150    0.083   -1.802    0.072   -0.150   -0.106
##      fea_gen       0.181    0.122    1.486    0.137    0.181    0.102
##      tra_gen       0.035    0.112    0.312    0.755    0.035    0.022
##      rit_gen       0.253    0.118    2.149    0.032    0.253    0.145
##      male         0.237    0.178    1.333    0.182    0.237    0.081
##      age          0.053    0.022    2.353    0.019    0.053    0.106
##      inc          0.007    0.084    0.086    0.932    0.007    0.006
##
## Covariances:
##      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
##      int_gen ~~
##      soc_gen      0.044    0.041    1.073    0.283    0.044    0.069
##      fea_gen     -0.012    0.031   -0.382    0.703   -0.012   -0.024
##      tra_gen     -0.009    0.036   -0.259    0.795   -0.009   -0.017
##      rit_gen      0.118    0.030    3.904    0.000    0.118    0.228
##      male        -0.023    0.020   -1.146    0.252   -0.023   -0.073
##      age         -0.049    0.199   -0.247    0.805   -0.049   -0.027
##      inc          0.004    0.043    0.093    0.926    0.004    0.006

```

##	soc_gen ~~						
##	fea_gen	-0.137	0.041	-3.357	0.001	-0.137	-0.209
##	tra_gen	-0.086	0.044	-1.949	0.051	-0.086	-0.117
##	rit_gen	-0.040	0.047	-0.852	0.394	-0.040	-0.060
##	male	0.040	0.023	1.689	0.091	0.040	0.098
##	age	-0.024	0.121	-0.197	0.843	-0.024	-0.010
##	inc	0.050	0.055	0.923	0.356	0.050	0.056
##	fea_gen ~~						
##	tra_gen	0.073	0.038	1.895	0.058	0.073	0.126
##	rit_gen	0.021	0.036	0.593	0.553	0.021	0.040
##	male	-0.093	0.019	-4.911	0.000	-0.093	-0.293
##	age	-0.206	0.069	-2.996	0.003	-0.206	-0.110
##	inc	-0.038	0.042	-0.904	0.366	-0.038	-0.053
##	tra_gen ~~						
##	rit_gen	0.179	0.040	4.517	0.000	0.179	0.304
##	male	0.031	0.023	1.349	0.177	0.031	0.086
##	age	0.110	0.169	0.653	0.514	0.110	0.053
##	inc	0.056	0.046	1.204	0.229	0.056	0.070
##	rit_gen ~~						
##	male	0.006	0.021	0.278	0.781	0.006	0.018
##	age	0.082	0.110	0.745	0.456	0.082	0.043
##	inc	-0.032	0.040	-0.811	0.418	-0.032	-0.044
##	male ~~						
##	age	0.212	0.107	1.978	0.048	0.212	0.185
##	inc	0.015	0.027	0.572	0.568	0.015	0.035
##	age ~~						
##	inc	0.380	0.314	1.211	0.226	0.380	0.148
##	.N4P.BOT_1 ~~						
##	.N4P.BOT_2	0.698	0.116	6.018	0.000	0.698	0.435
##	.N4P.BOT_3	0.412	0.088	4.679	0.000	0.412	0.313
##	.N4P.BOT_4	0.455	0.080	5.713	0.000	0.455	0.370
##	.N4P.SOC_1	0.264	0.116	2.275	0.023	0.264	0.151
##	.N4P.SOC_2	0.309	0.116	2.665	0.008	0.309	0.174
##	.N4P.SOC_3	0.246	0.113	2.184	0.029	0.246	0.145
##	.N4P.SOC_4	0.215	0.119	1.810	0.070	0.215	0.118
##	.N4P.SOC_5	0.160	0.118	1.361	0.173	0.160	0.084
##	.N4P.SOC_6	0.308	0.120	2.565	0.010	0.308	0.167
##	.N4P.SOC_7	0.252	0.096	2.609	0.009	0.252	0.155
##	.N4P.SOC_8	0.220	0.111	1.978	0.048	0.220	0.126
##	.N4P.SOC_9	0.193	0.116	1.657	0.097	0.193	0.108
##	.N4P.INT_1	0.122	0.103	1.189	0.235	0.122	0.071
##	.N4P.INT_2	0.562	0.127	4.419	0.000	0.562	0.306
##	.N4P.INT_3	0.304	0.111	2.747	0.006	0.304	0.179
##	.N4P.INT_4	0.258	0.097	2.670	0.008	0.258	0.166
##	.N4P.INT_5	0.343	0.104	3.311	0.001	0.343	0.203
##	.N4P.INT_6	0.445	0.101	4.403	0.000	0.445	0.291
##	.N4P.INT_7	0.542	0.100	5.446	0.000	0.542	0.359
##	.N4P.INT_8	0.046	0.106	0.430	0.667	0.046	0.027
##	.N4P.INT_9	0.396	0.100	3.946	0.000	0.396	0.259
##	.N4P.BOT_2 ~~						
##	.N4P.BOT_3	0.458	0.087	5.240	0.000	0.458	0.331
##	.N4P.BOT_4	0.270	0.081	3.329	0.001	0.270	0.209
##	.N4P.SOC_1	0.180	0.119	1.512	0.130	0.180	0.098
##	.N4P.SOC_2	0.449	0.118	3.794	0.000	0.449	0.240

##	.N4P.SOC_3	0.160	0.120	1.334	0.182	0.160	0.090
##	.N4P.SOC_4	0.161	0.128	1.263	0.207	0.161	0.084
##	.N4P.SOC_5	0.261	0.128	2.039	0.041	0.261	0.130
##	.N4P.SOC_6	0.138	0.122	1.131	0.258	0.138	0.071
##	.N4P.SOC_7	0.126	0.103	1.220	0.223	0.126	0.074
##	.N4P.SOC_8	0.213	0.132	1.615	0.106	0.213	0.116
##	.N4P.SOC_9	0.212	0.124	1.710	0.087	0.212	0.113
##	.N4P.INT_1	0.071	0.109	0.649	0.516	0.071	0.039
##	.N4P.INT_2	0.288	0.128	2.245	0.025	0.288	0.149
##	.N4P.INT_3	0.171	0.118	1.444	0.149	0.171	0.095
##	.N4P.INT_4	0.184	0.098	1.880	0.060	0.184	0.112
##	.N4P.INT_5	0.247	0.106	2.333	0.020	0.247	0.139
##	.N4P.INT_6	0.111	0.111	1.001	0.317	0.111	0.069
##	.N4P.INT_7	0.162	0.099	1.630	0.103	0.162	0.102
##	.N4P.INT_8	0.131	0.122	1.072	0.284	0.131	0.072
##	.N4P.INT_9	0.210	0.105	1.993	0.046	0.210	0.130
##	.N4P.BOT_3 ~~						
##	.N4P.BOT_4	0.372	0.069	5.416	0.000	0.372	0.352
##	.N4P.SOC_1	0.065	0.097	0.676	0.499	0.065	0.044
##	.N4P.SOC_2	0.325	0.098	3.322	0.001	0.325	0.212
##	.N4P.SOC_3	0.255	0.094	2.716	0.007	0.255	0.175
##	.N4P.SOC_4	0.074	0.100	0.739	0.460	0.074	0.047
##	.N4P.SOC_5	0.053	0.098	0.538	0.590	0.053	0.032
##	.N4P.SOC_6	0.057	0.099	0.576	0.564	0.057	0.036
##	.N4P.SOC_7	-0.038	0.090	-0.421	0.674	-0.038	-0.027
##	.N4P.SOC_8	0.036	0.096	0.371	0.711	0.036	0.024
##	.N4P.SOC_9	0.153	0.090	1.713	0.087	0.153	0.100
##	.N4P.INT_1	0.248	0.094	2.634	0.008	0.248	0.167
##	.N4P.INT_2	0.203	0.099	2.047	0.041	0.203	0.128
##	.N4P.INT_3	0.360	0.092	3.899	0.000	0.360	0.245
##	.N4P.INT_4	0.319	0.083	3.840	0.000	0.319	0.238
##	.N4P.INT_5	0.032	0.100	0.325	0.745	0.032	0.022
##	.N4P.INT_6	-0.088	0.079	-1.120	0.263	-0.088	-0.067
##	.N4P.INT_7	0.236	0.092	2.574	0.010	0.236	0.181
##	.N4P.INT_8	0.070	0.089	0.782	0.434	0.070	0.047
##	.N4P.INT_9	0.479	0.087	5.480	0.000	0.479	0.364
##	.N4P.BOT_4 ~~						
##	.N4P.SOC_1	-0.014	0.080	-0.181	0.856	-0.014	-0.010
##	.N4P.SOC_2	-0.026	0.086	-0.303	0.762	-0.026	-0.018
##	.N4P.SOC_3	0.094	0.089	1.047	0.295	0.094	0.069
##	.N4P.SOC_4	-0.013	0.087	-0.154	0.878	-0.013	-0.009
##	.N4P.SOC_5	-0.005	0.090	-0.052	0.958	-0.005	-0.003
##	.N4P.SOC_6	-0.202	0.083	-2.435	0.015	-0.202	-0.136
##	.N4P.SOC_7	-0.269	0.079	-3.423	0.001	-0.269	-0.206
##	.N4P.SOC_8	-0.194	0.087	-2.230	0.026	-0.194	-0.139
##	.N4P.SOC_9	-0.008	0.089	-0.086	0.931	-0.008	-0.005
##	.N4P.INT_1	0.259	0.081	3.197	0.001	0.259	0.186
##	.N4P.INT_2	0.008	0.079	0.103	0.918	0.008	0.006
##	.N4P.INT_3	0.165	0.082	2.015	0.044	0.165	0.120
##	.N4P.INT_4	0.119	0.072	1.662	0.096	0.119	0.095
##	.N4P.INT_5	0.122	0.074	1.656	0.098	0.122	0.090
##	.N4P.INT_6	0.017	0.070	0.245	0.806	0.017	0.014
##	.N4P.INT_7	0.367	0.071	5.143	0.000	0.367	0.301
##	.N4P.INT_8	-0.069	0.079	-0.875	0.382	-0.069	-0.050

##	.N4P.INT_9	0.180	0.069	2.604	0.009	0.180	0.146
##	.N4P.SOC_1 ~~						
##	.N4P.SOC_2	1.058	0.140	7.584	0.000	1.058	0.521
##	.N4P.SOC_3	0.970	0.137	7.065	0.000	0.970	0.501
##	.N4P.SOC_4	1.295	0.156	8.313	0.000	1.295	0.622
##	.N4P.SOC_5	1.045	0.152	6.876	0.000	1.045	0.480
##	.N4P.SOC_6	0.602	0.145	4.153	0.000	0.602	0.286
##	.N4P.SOC_7	0.653	0.123	5.319	0.000	0.653	0.352
##	.N4P.SOC_8	0.303	0.127	2.384	0.017	0.303	0.152
##	.N4P.SOC_9	1.107	0.144	7.662	0.000	1.107	0.541
##	.N4P.INT_1	-0.275	0.133	-2.065	0.039	-0.275	-0.140
##	.N4P.INT_2	0.420	0.144	2.922	0.003	0.420	0.200
##	.N4P.INT_3	0.134	0.132	1.015	0.310	0.134	0.069
##	.N4P.INT_4	0.346	0.109	3.174	0.002	0.346	0.195
##	.N4P.INT_5	0.005	0.131	0.039	0.969	0.005	0.003
##	.N4P.INT_6	0.200	0.112	1.778	0.075	0.200	0.114
##	.N4P.INT_7	0.050	0.125	0.395	0.693	0.050	0.029
##	.N4P.INT_8	-0.212	0.130	-1.629	0.103	-0.212	-0.108
##	.N4P.INT_9	0.480	0.135	3.556	0.000	0.480	0.274
##	.N4P.SOC_2 ~~						
##	.N4P.SOC_3	0.996	0.132	7.546	0.000	0.996	0.505
##	.N4P.SOC_4	1.201	0.142	8.448	0.000	1.201	0.567
##	.N4P.SOC_5	1.048	0.144	7.281	0.000	1.048	0.473
##	.N4P.SOC_6	0.800	0.136	5.895	0.000	0.800	0.374
##	.N4P.SOC_7	0.742	0.119	6.252	0.000	0.742	0.393
##	.N4P.SOC_8	0.603	0.134	4.503	0.000	0.603	0.298
##	.N4P.SOC_9	1.066	0.141	7.545	0.000	1.066	0.512
##	.N4P.INT_1	-0.289	0.131	-2.200	0.028	-0.289	-0.144
##	.N4P.INT_2	0.650	0.149	4.355	0.000	0.650	0.304
##	.N4P.INT_3	0.143	0.120	1.192	0.233	0.143	0.072
##	.N4P.INT_4	0.413	0.106	3.877	0.000	0.413	0.228
##	.N4P.INT_5	0.024	0.130	0.186	0.852	0.024	0.012
##	.N4P.INT_6	0.172	0.119	1.448	0.148	0.172	0.097
##	.N4P.INT_7	0.056	0.108	0.520	0.603	0.056	0.032
##	.N4P.INT_8	-0.277	0.126	-2.196	0.028	-0.277	-0.139
##	.N4P.INT_9	0.321	0.115	2.797	0.005	0.321	0.180
##	.N4P.SOC_3 ~~						
##	.N4P.SOC_4	1.221	0.144	8.454	0.000	1.221	0.605
##	.N4P.SOC_5	0.881	0.139	6.347	0.000	0.881	0.418
##	.N4P.SOC_6	0.686	0.139	4.949	0.000	0.686	0.336
##	.N4P.SOC_7	0.627	0.117	5.379	0.000	0.627	0.348
##	.N4P.SOC_8	0.484	0.134	3.608	0.000	0.484	0.251
##	.N4P.SOC_9	1.127	0.138	8.186	0.000	1.127	0.568
##	.N4P.INT_1	-0.233	0.131	-1.780	0.075	-0.233	-0.122
##	.N4P.INT_2	0.630	0.126	5.008	0.000	0.630	0.309
##	.N4P.INT_3	0.268	0.124	2.170	0.030	0.268	0.142
##	.N4P.INT_4	0.470	0.097	4.821	0.000	0.470	0.272
##	.N4P.INT_5	0.081	0.116	0.703	0.482	0.081	0.043
##	.N4P.INT_6	0.182	0.110	1.658	0.097	0.182	0.107
##	.N4P.INT_7	0.113	0.114	0.993	0.321	0.113	0.067
##	.N4P.INT_8	-0.260	0.126	-2.063	0.039	-0.260	-0.137
##	.N4P.INT_9	0.606	0.110	5.522	0.000	0.606	0.357
##	.N4P.SOC_4 ~~						
##	.N4P.SOC_5	1.000	0.150	6.674	0.000	1.000	0.441

##	.N4P.SOC_6	0.723	0.152	4.769	0.000	0.723	0.329
##	.N4P.SOC_7	0.708	0.130	5.440	0.000	0.708	0.366
##	.N4P.SOC_8	0.515	0.139	3.703	0.000	0.515	0.248
##	.N4P.SOC_9	1.150	0.147	7.805	0.000	1.150	0.540
##	.N4P.INT_1	-0.249	0.135	-1.840	0.066	-0.249	-0.121
##	.N4P.INT_2	0.521	0.134	3.881	0.000	0.521	0.238
##	.N4P.INT_3	-0.065	0.133	-0.492	0.623	-0.065	-0.032
##	.N4P.INT_4	0.220	0.112	1.971	0.049	0.220	0.119
##	.N4P.INT_5	-0.033	0.129	-0.256	0.798	-0.033	-0.016
##	.N4P.INT_6	0.145	0.123	1.183	0.237	0.145	0.080
##	.N4P.INT_7	-0.008	0.121	-0.067	0.947	-0.008	-0.004
##	.N4P.INT_8	-0.326	0.137	-2.378	0.017	-0.326	-0.159
##	.N4P.INT_9	0.332	0.126	2.630	0.009	0.332	0.182
##	.N4P.SOC_5 ~~						
##	.N4P.SOC_6	0.733	0.155	4.728	0.000	0.733	0.320
##	.N4P.SOC_7	0.659	0.124	5.298	0.000	0.659	0.326
##	.N4P.SOC_8	0.238	0.136	1.750	0.080	0.238	0.110
##	.N4P.SOC_9	0.978	0.149	6.577	0.000	0.978	0.439
##	.N4P.INT_1	-0.322	0.143	-2.263	0.024	-0.322	-0.150
##	.N4P.INT_2	0.398	0.142	2.807	0.005	0.398	0.174
##	.N4P.INT_3	-0.183	0.139	-1.316	0.188	-0.183	-0.086
##	.N4P.INT_4	0.455	0.122	3.730	0.000	0.455	0.235
##	.N4P.INT_5	-0.046	0.130	-0.356	0.722	-0.046	-0.022
##	.N4P.INT_6	0.062	0.119	0.526	0.599	0.062	0.033
##	.N4P.INT_7	0.048	0.119	0.407	0.684	0.048	0.026
##	.N4P.INT_8	-0.459	0.139	-3.315	0.001	-0.459	-0.215
##	.N4P.INT_9	0.306	0.131	2.328	0.020	0.306	0.160
##	.N4P.SOC_6 ~~						
##	.N4P.SOC_7	0.749	0.135	5.535	0.000	0.749	0.383
##	.N4P.SOC_8	0.620	0.138	4.505	0.000	0.620	0.296
##	.N4P.SOC_9	0.726	0.147	4.954	0.000	0.726	0.337
##	.N4P.INT_1	-0.522	0.138	-3.787	0.000	-0.522	-0.251
##	.N4P.INT_2	0.777	0.147	5.284	0.000	0.777	0.351
##	.N4P.INT_3	-0.058	0.132	-0.438	0.661	-0.058	-0.028
##	.N4P.INT_4	0.355	0.110	3.245	0.001	0.355	0.190
##	.N4P.INT_5	-0.091	0.130	-0.700	0.484	-0.091	-0.045
##	.N4P.INT_6	0.322	0.123	2.627	0.009	0.322	0.175
##	.N4P.INT_7	0.031	0.112	0.274	0.784	0.031	0.017
##	.N4P.INT_8	-0.412	0.135	-3.047	0.002	-0.412	-0.199
##	.N4P.INT_9	0.426	0.117	3.636	0.000	0.426	0.231
##	.N4P.SOC_7 ~~						
##	.N4P.SOC_8	0.792	0.127	6.257	0.000	0.792	0.428
##	.N4P.SOC_9	0.791	0.130	6.106	0.000	0.791	0.416
##	.N4P.INT_1	-0.665	0.118	-5.638	0.000	-0.665	-0.363
##	.N4P.INT_2	0.651	0.110	5.938	0.000	0.651	0.333
##	.N4P.INT_3	-0.379	0.114	-3.310	0.001	-0.379	-0.209
##	.N4P.INT_4	0.039	0.096	0.403	0.687	0.039	0.024
##	.N4P.INT_5	0.080	0.108	0.738	0.460	0.080	0.044
##	.N4P.INT_6	0.234	0.106	2.208	0.027	0.234	0.144
##	.N4P.INT_7	-0.085	0.099	-0.852	0.394	-0.085	-0.053
##	.N4P.INT_8	-0.333	0.120	-2.781	0.005	-0.333	-0.183
##	.N4P.INT_9	0.092	0.101	0.913	0.361	0.092	0.056
##	.N4P.SOC_8 ~~						
##	.N4P.SOC_9	0.671	0.136	4.947	0.000	0.671	0.330

##	.N4P.INT_1	-0.529	0.123	-4.295	0.000	-0.529	-0.269
##	.N4P.INT_2	0.456	0.139	3.286	0.001	0.456	0.218
##	.N4P.INT_3	-0.152	0.122	-1.243	0.214	-0.152	-0.078
##	.N4P.INT_4	0.165	0.101	1.642	0.101	0.165	0.093
##	.N4P.INT_5	0.007	0.117	0.062	0.951	0.007	0.004
##	.N4P.INT_6	0.364	0.125	2.910	0.004	0.364	0.209
##	.N4P.INT_7	0.017	0.110	0.157	0.875	0.017	0.010
##	.N4P.INT_8	-0.386	0.135	-2.868	0.004	-0.386	-0.198
##	.N4P.INT_9	0.345	0.107	3.212	0.001	0.345	0.198
##	.N4P.SOC_9 ~~						
##	.N4P.INT_1	-0.440	0.127	-3.457	0.001	-0.440	-0.218
##	.N4P.INT_2	0.536	0.141	3.804	0.000	0.536	0.249
##	.N4P.INT_3	-0.002	0.123	-0.017	0.987	-0.002	-0.001
##	.N4P.INT_4	0.397	0.105	3.786	0.000	0.397	0.218
##	.N4P.INT_5	0.073	0.128	0.571	0.568	0.073	0.037
##	.N4P.INT_6	0.170	0.121	1.399	0.162	0.170	0.095
##	.N4P.INT_7	0.065	0.116	0.563	0.574	0.065	0.037
##	.N4P.INT_8	-0.288	0.134	-2.158	0.031	-0.288	-0.144
##	.N4P.INT_9	0.611	0.115	5.312	0.000	0.611	0.341
##	.N4P.INT_1 ~~						
##	.N4P.INT_2	-0.432	0.136	-3.169	0.002	-0.432	-0.208
##	.N4P.INT_3	0.466	0.123	3.791	0.000	0.466	0.242
##	.N4P.INT_4	-0.088	0.110	-0.799	0.424	-0.088	-0.050
##	.N4P.INT_5	0.200	0.115	1.728	0.084	0.200	0.104
##	.N4P.INT_6	-0.200	0.104	-1.916	0.055	-0.200	-0.116
##	.N4P.INT_7	0.210	0.111	1.901	0.057	0.210	0.123
##	.N4P.INT_8	0.470	0.122	3.852	0.000	0.470	0.242
##	.N4P.INT_9	-0.108	0.106	-1.026	0.305	-0.108	-0.063
##	.N4P.INT_2 ~~						
##	.N4P.INT_3	0.245	0.115	2.137	0.033	0.245	0.120
##	.N4P.INT_4	0.250	0.110	2.277	0.023	0.250	0.134
##	.N4P.INT_5	0.088	0.138	0.636	0.525	0.088	0.043
##	.N4P.INT_6	0.546	0.122	4.457	0.000	0.546	0.297
##	.N4P.INT_7	0.177	0.118	1.504	0.133	0.177	0.097
##	.N4P.INT_8	-0.178	0.135	-1.314	0.189	-0.178	-0.086
##	.N4P.INT_9	0.484	0.111	4.345	0.000	0.484	0.263
##	.N4P.INT_3 ~~						
##	.N4P.INT_4	0.114	0.100	1.143	0.253	0.114	0.066
##	.N4P.INT_5	0.021	0.119	0.180	0.857	0.021	0.011
##	.N4P.INT_6	0.216	0.108	2.012	0.044	0.216	0.127
##	.N4P.INT_7	0.449	0.112	4.003	0.000	0.449	0.266
##	.N4P.INT_8	0.193	0.123	1.563	0.118	0.193	0.101
##	.N4P.INT_9	0.342	0.114	3.005	0.003	0.342	0.200
##	.N4P.INT_4 ~~						
##	.N4P.INT_5	-0.088	0.123	-0.711	0.477	-0.088	-0.051
##	.N4P.INT_6	0.236	0.089	2.644	0.008	0.236	0.152
##	.N4P.INT_7	0.312	0.093	3.344	0.001	0.312	0.203
##	.N4P.INT_8	0.001	0.112	0.007	0.994	0.001	0.000
##	.N4P.INT_9	0.442	0.118	3.734	0.000	0.442	0.284
##	.N4P.INT_5 ~~						
##	.N4P.INT_6	0.070	0.111	0.632	0.527	0.070	0.041
##	.N4P.INT_7	0.179	0.117	1.535	0.125	0.179	0.107
##	.N4P.INT_8	0.373	0.128	2.915	0.004	0.373	0.196
##	.N4P.INT_9	0.130	0.111	1.173	0.241	0.130	0.077

```

## .N4P.INT_6 ~~
## .N4P.INT_7      0.306    0.094    3.250    0.001    0.306    0.202
## .N4P.INT_8     -0.083    0.113   -0.734    0.463   -0.083   -0.048
## .N4P.INT_9      0.172    0.105    1.633    0.102    0.172    0.113
## .N4P.INT_7 ~~
## .N4P.INT_8      0.010    0.104    0.095    0.924    0.010    0.006
## .N4P.INT_9      0.403    0.105    3.844    0.000    0.403    0.266
## .N4P.INT_8 ~~
## .N4P.INT_9     -0.222    0.115   -1.933    0.053   -0.222   -0.129
##
## Variances:
##      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
## .N4P.BOT_1      1.523    0.112   13.658    0.000    1.523    0.857
## .N4P.BOT_2      1.695    0.129   13.099    0.000    1.695    0.891
## .N4P.BOT_3      1.132    0.097   11.623    0.000    1.132    0.889
## .N4P.BOT_4      0.989    0.098   10.105    0.000    0.989    0.891
## .N4P.SOC_1      1.997    0.162   12.310    0.000    1.997    0.941
## .N4P.SOC_2      2.067    0.149   13.832    0.000    2.067    0.933
## .N4P.SOC_3      1.878    0.144   13.086    0.000    1.878    0.905
## .N4P.SOC_4      2.171    0.165   13.141    0.000    2.171    0.917
## .N4P.SOC_5      2.371    0.160   14.827    0.000    2.371    0.941
## .N4P.SOC_6      2.215    0.162   13.654    0.000    2.215    0.954
## .N4P.SOC_7      1.726    0.141   12.209    0.000    1.726    0.884
## .N4P.SOC_8      1.983    0.167   11.840    0.000    1.983    0.913
## .N4P.SOC_9      2.094    0.158   13.268    0.000    2.094    0.918
## .N4P.INT_1      1.948    0.144   13.519    0.000    1.948    0.932
## .N4P.INT_2      2.210    0.172   12.818    0.000    2.210    0.951
## .N4P.INT_3      1.903    0.154   12.378    0.000    1.903    0.900
## .N4P.INT_4      1.586    0.136   11.687    0.000    1.586    0.893
## .N4P.INT_5      1.873    0.140   13.333    0.000    1.873    0.901
## .N4P.INT_6      1.531    0.115   13.325    0.000    1.531    0.897
## .N4P.INT_7      1.498    0.130   11.527    0.000    1.498    0.917
## .N4P.INT_8      1.930    0.123   15.714    0.000    1.930    0.941
## .N4P.INT_9      1.532    0.139   11.020    0.000    1.532    0.928
## int_gen         0.493    0.036   13.727    0.000    0.493    1.000
## soc_gen         0.832    0.074   11.288    0.000    0.832    1.000
## fea_gen         0.519    0.039   13.202    0.000    0.519    1.000
## tra_gen         0.645    0.053   12.100    0.000    0.645    1.000
## rit_gen         0.540    0.061    8.846    0.000    0.540    1.000
## male           0.195    0.013   15.516    0.000    0.195    1.000
## age            6.678    4.886    1.367    0.172    6.678    1.000
## inc            0.984    0.113    8.672    0.000    0.984    1.000

```

