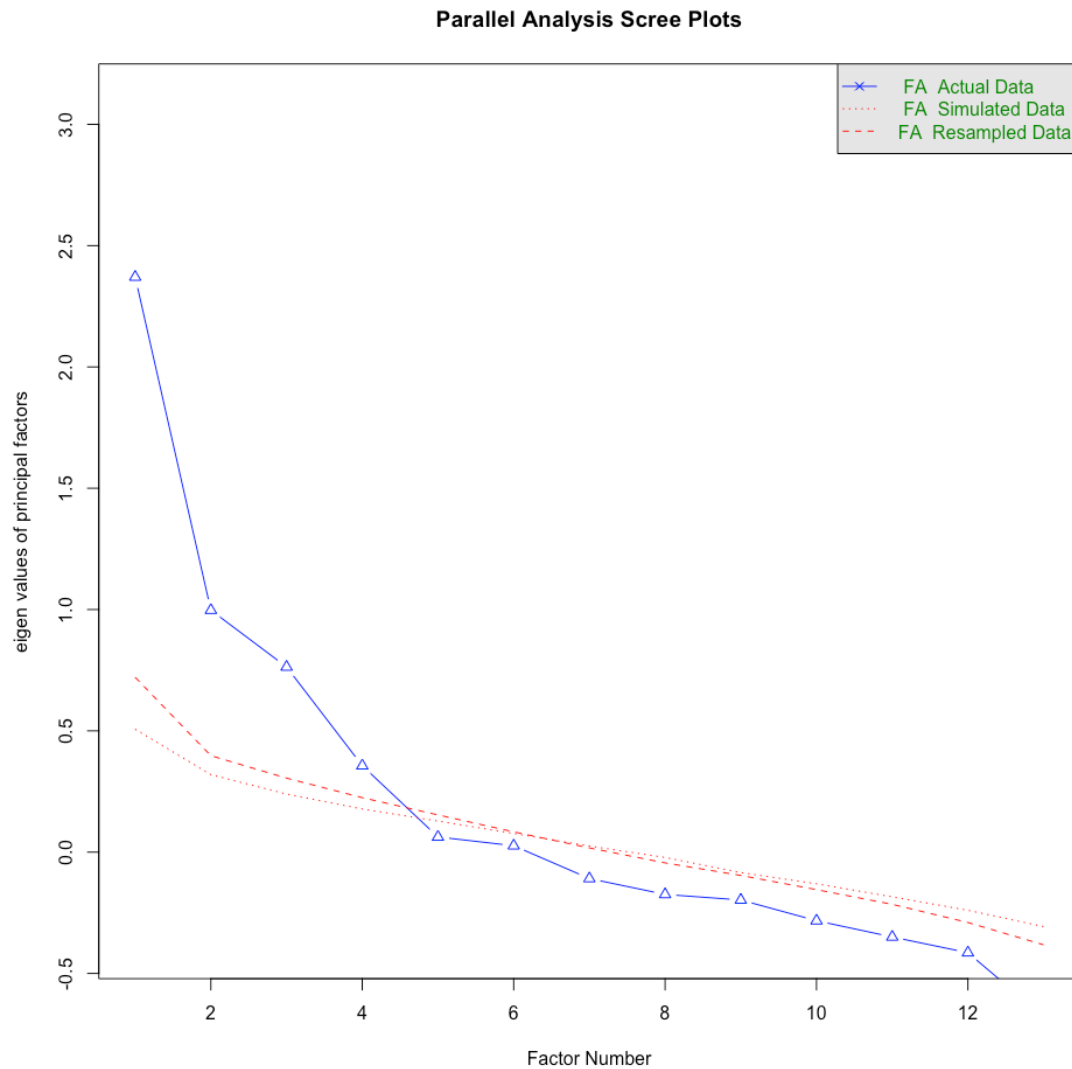


5.3.4a Validity Results: Experiences Seeking Employment



Parallel analysis suggests that the number of factors = 4

Factor Analysis

EFA - One-factor model

Standardized loadings (pattern matrix) based upon correlation matrix

| | MR1 | h2 | u2 | com |
|--------------|------|-------|------|-----|
| EM_ESE_G1_R | 0.28 | 0.077 | 0.92 | 1 |
| EM_ESE_G2_R | 0.33 | 0.109 | 0.89 | 1 |
| EM_ESE_G3 | 0.48 | 0.234 | 0.77 | 1 |
| EM_ESE_S1 | 0.56 | 0.313 | 0.69 | 1 |
| EM_ESE_S2_R | 0.56 | 0.313 | 0.69 | 1 |
| EM_ESE_S3 | 0.25 | 0.064 | 0.94 | 1 |
| EM_ESE_S4 | 0.36 | 0.128 | 0.87 | 1 |
| EM_ESE_S5 | 0.28 | 0.079 | 0.92 | 1 |
| EM_ESE_S6 | 0.20 | 0.041 | 0.96 | 1 |
| EM_ESE_S7_R | 0.58 | 0.335 | 0.67 | 1 |
| EM_ESE_S8 | 0.67 | 0.455 | 0.54 | 1 |
| EM_ESE_S9_R | 0.39 | 0.150 | 0.85 | 1 |
| EM_ESE_S10_R | 0.24 | 0.056 | 0.94 | 1 |

MR1
SS loadings 2.35
Proportion Var 0.18

Mean item complexity = 1

Test of the hypothesis that 1 factor is sufficient.

df null model = 78 with the objective function = 9.27 with Chi Square = 1884.8

df of the model are 65 and the objective function was 7.96

The root mean square of the residuals (RMSR) is 0.13

The df corrected root mean square of the residuals is 0.14

The harmonic n.obs is 210 with the empirical chi square 545.55 with prob < 4.5e-77

The total n.obs was 209.5385 with Likelihood Chi Square = 1612.53 with prob < 5.6e-294

Tucker Lewis Index of factoring reliability = -0.031

RMSEA index = 0.337 and the 90 % confidence intervals are 0.324 0.352

BIC = 1265.12

Fit based upon off diagonal values = 0.65

Measures of factor score adequacy

| | MR1 |
|---|------|
| Correlation of (regression) scores with factors | 0.88 |
| Multiple R square of scores with factors | 0.77 |
| Minimum correlation of possible factor scores | 0.54 |

EFA - Two-factor model

Standardized loadings (pattern matrix) based upon correlation matrix

| | MR1 | MR2 | h2 | u2 | com |
|--------------|------|-------|-------|--------|-----|
| EM_ESE_G1_R | 0.23 | 0.09 | 0.071 | 0.9286 | 1.3 |
| EM_ESE_G2_R | 0.45 | -0.11 | 0.185 | 0.8155 | 1.1 |
| EM_ESE_G3 | 0.48 | 0.04 | 0.247 | 0.7531 | 1.0 |
| EM_ESE_S1 | 0.00 | 0.99 | 0.991 | 0.0093 | 1.0 |
| EM_ESE_S2_R | 0.00 | 0.99 | 0.991 | 0.0093 | 1.0 |
| EM_ESE_S3 | 0.21 | 0.07 | 0.059 | 0.9414 | 1.2 |
| EM_ESE_S4 | 0.34 | 0.05 | 0.128 | 0.8718 | 1.1 |
| EM_ESE_S5 | 0.34 | -0.04 | 0.106 | 0.8935 | 1.0 |
| EM_ESE_S6 | 0.24 | -0.02 | 0.055 | 0.9452 | 1.0 |
| EM_ESE_S7_R | 0.65 | -0.02 | 0.419 | 0.5813 | 1.0 |
| EM_ESE_S8 | 0.67 | 0.07 | 0.487 | 0.5133 | 1.0 |
| EM_ESE_S9_R | 0.48 | -0.06 | 0.213 | 0.7866 | 1.0 |
| EM_ESE_S10_R | 0.33 | -0.08 | 0.096 | 0.9036 | 1.1 |

| | MR1 | MR2 |
|-----------------------|------|------|
| SS loadings | 2.02 | 2.02 |
| Proportion Var | 0.16 | 0.16 |
| Cumulative Var | 0.16 | 0.31 |
| Proportion Explained | 0.50 | 0.50 |
| Cumulative Proportion | 0.50 | 1.00 |

With factor correlations of

| | MR1 | MR2 |
|-----|------|------|
| MR1 | 1.00 | 0.31 |
| MR2 | 0.31 | 1.00 |

Mean item complexity = 1.1

Test of the hypothesis that 2 factors are sufficient.

df null model = 78 with the objective function = 9.27 with Chi Square = 1884.8

df of the model are 53 and the objective function was 3.17

The root mean square of the residuals (RMSR) is 0.09

The df corrected root mean square of the residuals is 0.1

The harmonic n.obs is 210 with the empirical chi square 238.86 with prob < 2e-25

The total n.obs was 209.5385 with Likelihood Chi Square = 639.96 with prob < 1.1e-101

Tucker Lewis Index of factoring reliability = 0.519

RMSEA index = 0.23 and the 90 % confidence intervals are 0.215 0.247

BIC = 356.68

Fit based upon off diagonal values = 0.85

Measures of factor score adequacy

| | MR1 | MR2 |
|---|------|------|
| Correlation of (regression) scores with factors | 0.87 | 1.00 |
| Multiple R square of scores with factors | 0.76 | 0.99 |
| Minimum correlation of possible factor scores | 0.51 | 0.99 |

EFA - Three-factor model

Standardized loadings (pattern matrix) based upon correlation matrix

| | MR2 | MR3 | MR1 | h2 | u2 | com |
|--------------|-------|-------|-------|-------|--------|-----|
| EM_ESE_G1_R | 0.08 | 0.24 | 0.00 | 0.076 | 0.9242 | 1.2 |
| EM_ESE_G2_R | -0.07 | 0.27 | 0.30 | 0.194 | 0.8057 | 2.1 |
| EM_ESE_G3 | 0.01 | 0.56 | -0.05 | 0.310 | 0.6904 | 1.0 |
| EM_ESE_S1 | 1.00 | 0.00 | 0.00 | 0.997 | 0.0026 | 1.0 |
| EM_ESE_S2_R | 1.00 | 0.00 | 0.00 | 0.997 | 0.0026 | 1.0 |
| EM_ESE_S3 | 0.03 | 0.35 | -0.18 | 0.131 | 0.8693 | 1.5 |
| EM_ESE_S4 | 0.05 | 0.34 | 0.03 | 0.134 | 0.8664 | 1.1 |
| EM_ESE_S5 | -0.04 | 0.29 | 0.09 | 0.102 | 0.8975 | 1.2 |
| EM_ESE_S6 | 0.06 | -0.07 | 0.50 | 0.248 | 0.7524 | 1.1 |
| EM_ESE_S7_R | -0.03 | 0.66 | 0.06 | 0.451 | 0.5487 | 1.0 |
| EM_ESE_S8 | 0.03 | 0.77 | -0.01 | 0.604 | 0.3961 | 1.0 |
| EM_ESE_S9_R | 0.01 | 0.14 | 0.62 | 0.447 | 0.5531 | 1.1 |
| EM_ESE_S10_R | 0.00 | -0.07 | 0.70 | 0.475 | 0.5247 | 1.0 |

| | MR2 | MR3 | MR1 |
|-----------------------|------|------|------|
| SS loadings | 2.02 | 1.86 | 1.28 |
| Proportion Var | 0.16 | 0.14 | 0.10 |
| Cumulative Var | 0.16 | 0.30 | 0.40 |
| Proportion Explained | 0.39 | 0.36 | 0.25 |
| Cumulative Proportion | 0.39 | 0.75 | 1.00 |

With factor correlations of

| | MR2 | MR3 | MR1 |
|-----|------|------|------|
| MR2 | 1.00 | 0.29 | 0.10 |
| MR3 | 0.29 | 1.00 | 0.26 |
| MR1 | 0.10 | 0.26 | 1.00 |

Mean item complexity = 1.2

Test of the hypothesis that 3 factors are sufficient.

df null model = 78 with the objective function = 9.27 with Chi Square = 1884.8

df of the model are 42 and the objective function was 1.51

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 n.obs is 210 with the empirical chi square 70.86 with prob <

0.0035

The total n.obs was 209.5385 with Likelihood Chi Square = 304.07 with
prob < 1.9e-41

Tucker Lewis Index of factoring reliability = 0.728

RMSEA index = 0.172 and the 90 % confidence intervals are 0.155 0.192

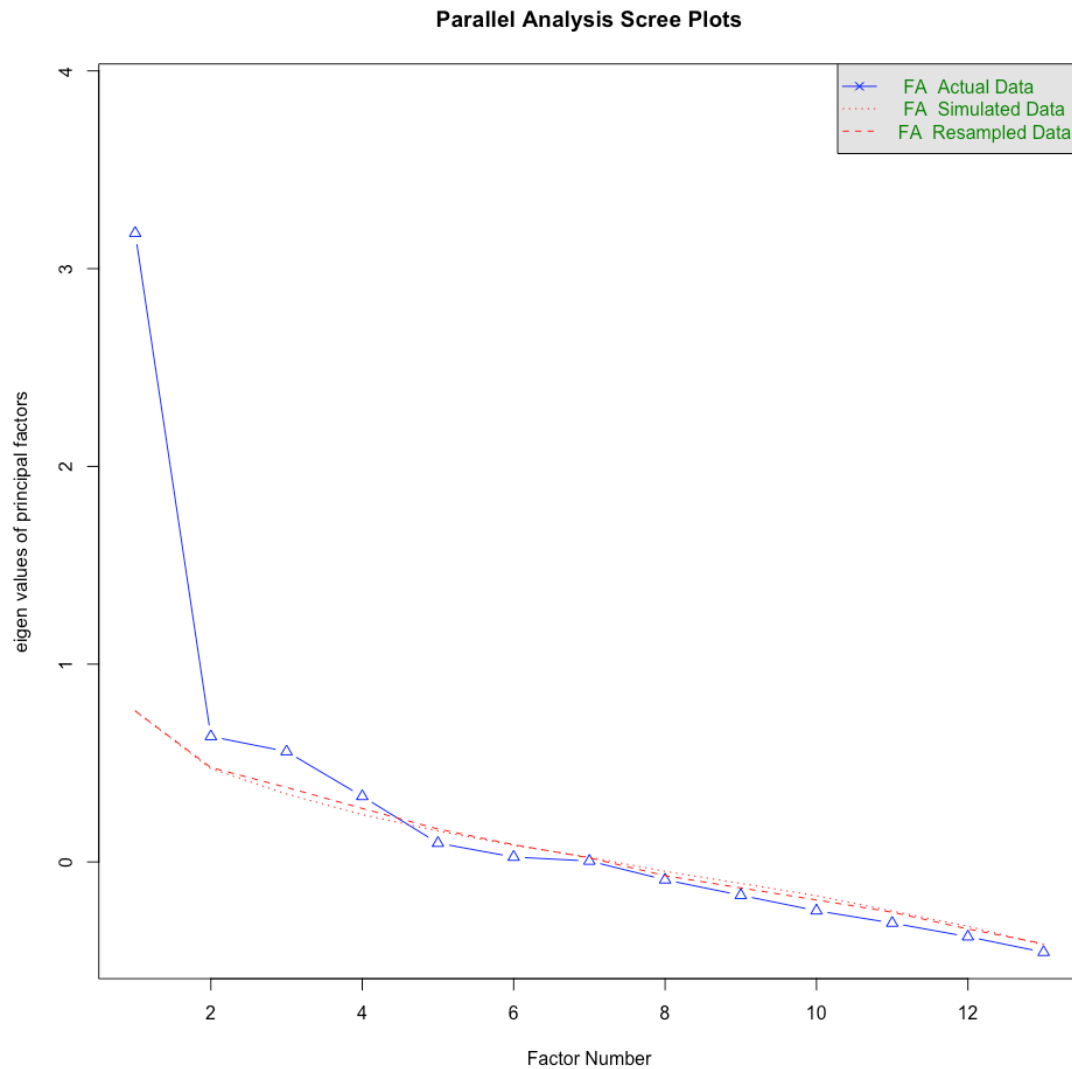
BIC = 79.58

Fit based upon off diagonal values = 0.95

Measures of factor score adequacy

| | MR2 | MR3 | MR1 |
|---|-----|------|------|
| Correlation of (regression) scores with factors | 1 | 0.88 | 0.83 |
| Multiple R square of scores with factors | 1 | 0.78 | 0.69 |
| Minimum correlation of possible factor scores | 1 | 0.55 | 0.38 |

5.3.4a Validity Results: Job Experiences



Parallel analysis suggests that the number of factors = 4

Factor Analysis

EFA - One-factor model

Standardized loadings (pattern matrix) based upon correlation matrix

| | MR1 | h2 | u2 | com |
|------------|------|-------|------|-----|
| EM_JE_G1 | 0.71 | 0.505 | 0.50 | 1 |
| EM_JE_G2 | 0.55 | 0.298 | 0.70 | 1 |
| EM_JE_G3 | 0.57 | 0.324 | 0.68 | 1 |
| EM_JE_S1 | 0.15 | 0.024 | 0.98 | 1 |
| EM_JE_S3 | 0.49 | 0.241 | 0.76 | 1 |
| EM_JE_S4 | 0.61 | 0.367 | 0.63 | 1 |
| EM_JE_S5 | 0.64 | 0.413 | 0.59 | 1 |
| EM_JE_S6 | 0.59 | 0.350 | 0.65 | 1 |
| EM_JE_S7 | 0.45 | 0.202 | 0.80 | 1 |
| EM_JE_S8 | 0.40 | 0.158 | 0.84 | 1 |
| EM_JE_S9_R | 0.22 | 0.049 | 0.95 | 1 |
| EM_JE_S10 | 0.44 | 0.198 | 0.80 | 1 |
| EM_JE_S11 | 0.34 | 0.119 | 0.88 | 1 |

| | MR1 |
|----------------|------|
| SS loadings | 3.25 |
| Proportion Var | 0.25 |

Mean item complexity = 1

Test of the hypothesis that 1 factor is sufficient.

df null model = 78 with the objective function = 3.49 with Chi Square = 408.07

df of the model are 65 and the objective function was 1.31

The root mean square of the residuals (RMSR) is 0.1

The df corrected root mean square of the residuals is 0.1

The harmonic n.obs is 123 with the empirical chi square 176.2 with prob < 3.4e-12

The total n.obs was 123.2308 with Likelihood Chi Square = 152.54 with prob < 5.4e-09

Tucker Lewis Index of factoring reliability = 0.679

RMSEA index = 0.104 and the 90 % confidence intervals are 0.083 0.127

BIC = -160.37

Fit based upon off diagonal values = 0.87

Measures of factor score adequacy

| | MR1 |
|---|------|
| Correlation of (regression) scores with factors | 0.91 |
| Multiple R square of scores with factors | 0.83 |
| Minimum correlation of possible factor scores | 0.67 |

EFA - Two-factor model

Standardized loadings (pattern matrix) based upon correlation matrix

| | MR1 | MR2 | h2 | u2 | com |
|------------|-------|-------|-------|------|-----|
| EM_JE_G1 | 0.51 | 0.33 | 0.497 | 0.50 | 1.7 |
| EM_JE_G2 | 0.29 | 0.35 | 0.290 | 0.71 | 1.9 |
| EM_JE_G3 | 0.31 | 0.36 | 0.315 | 0.69 | 2.0 |
| EM_JE_S1 | 0.08 | 0.11 | 0.024 | 0.98 | 1.8 |
| EM_JE_S3 | 0.46 | 0.12 | 0.268 | 0.73 | 1.1 |
| EM_JE_S4 | 0.32 | 0.40 | 0.365 | 0.64 | 1.9 |
| EM_JE_S5 | 0.53 | 0.23 | 0.429 | 0.57 | 1.3 |
| EM_JE_S6 | 0.00 | 0.80 | 0.631 | 0.37 | 1.0 |
| EM_JE_S7 | -0.08 | 0.67 | 0.421 | 0.58 | 1.0 |
| EM_JE_S8 | 0.23 | 0.24 | 0.155 | 0.84 | 2.0 |
| EM_JE_S9_R | 0.29 | -0.03 | 0.079 | 0.92 | 1.0 |
| EM_JE_S10 | 0.65 | -0.11 | 0.379 | 0.62 | 1.1 |
| EM_JE_S11 | 0.62 | -0.21 | 0.333 | 0.67 | 1.2 |

| | MR1 | MR2 |
|-----------------------|------|------|
| SS loadings | 2.19 | 1.99 |
| Proportion Var | 0.17 | 0.15 |
| Cumulative Var | 0.17 | 0.32 |
| Proportion Explained | 0.52 | 0.48 |
| Cumulative Proportion | 0.52 | 1.00 |

With factor correlations of

| | MR1 | MR2 |
|-----|------|------|
| MR1 | 1.00 | 0.39 |
| MR2 | 0.39 | 1.00 |

Mean item complexity = 1.5

Test of the hypothesis that 2 factors are sufficient.

df null model = 78 with the objective function = 3.49 with Chi Square = 408.07

df of the model are 53 and the objective function was 0.92

The root mean square of the residuals (RMSR) is 0.07

The df corrected root mean square of the residuals is 0.09

The harmonic n.obs is 123 with the empirical chi square 105.28 with prob < 2.6e-05

The total n.obs was 123.2308 with Likelihood Chi Square = 106.54 with prob < 1.8e-05

Tucker Lewis Index of factoring reliability = 0.758

RMSEA index = 0.09 and the 90 % confidence intervals are 0.066 0.116

BIC = -148.61

Fit based upon off diagonal values = 0.92

Measures of factor score adequacy

| | MR1 | MR2 |
|---|------|------|
| Correlation of (regression) scores with factors | 0.88 | 0.89 |
| Multiple R square of scores with factors | 0.77 | 0.79 |
| Minimum correlation of possible factor scores | 0.54 | 0.58 |

EFA - Three-factor model

Standardized loadings (pattern matrix) based upon correlation matrix

| | MR1 | MR2 | MR3 | h2 | u2 | com |
|------------|-------|-------|-------|-------|------|-----|
| EM_JE_G1 | 0.43 | 0.23 | 0.23 | 0.483 | 0.52 | 2.1 |
| EM_JE_G2 | -0.04 | -0.04 | 0.86 | 0.693 | 0.31 | 1.0 |
| EM_JE_G3 | 0.05 | 0.04 | 0.69 | 0.533 | 0.47 | 1.0 |
| EM_JE_S1 | 0.13 | 0.16 | -0.09 | 0.041 | 0.96 | 2.5 |
| EM_JE_S3 | 0.49 | 0.15 | -0.01 | 0.301 | 0.70 | 1.2 |
| EM_JE_S4 | 0.32 | 0.36 | 0.10 | 0.370 | 0.63 | 2.1 |
| EM_JE_S5 | 0.49 | 0.17 | 0.15 | 0.427 | 0.57 | 1.4 |
| EM_JE_S6 | 0.01 | 0.78 | 0.08 | 0.666 | 0.33 | 1.0 |
| EM_JE_S7 | -0.03 | 0.78 | -0.07 | 0.551 | 0.45 | 1.0 |
| EM_JE_S8 | 0.10 | 0.08 | 0.34 | 0.184 | 0.82 | 1.3 |
| EM_JE_S9_R | 0.30 | 0.01 | -0.04 | 0.086 | 0.91 | 1.0 |
| EM_JE_S10 | 0.70 | -0.05 | -0.08 | 0.439 | 0.56 | 1.0 |
| EM_JE_S11 | 0.58 | -0.19 | 0.04 | 0.318 | 0.68 | 1.2 |

| | MR1 | MR2 | MR3 |
|-----------------------|------|------|------|
| SS loadings | 1.87 | 1.65 | 1.57 |
| Proportion Var | 0.14 | 0.13 | 0.12 |
| Cumulative Var | 0.14 | 0.27 | 0.39 |
| Proportion Explained | 0.37 | 0.32 | 0.31 |
| Cumulative Proportion | 0.37 | 0.69 | 1.00 |

With factor correlations of

| | MR1 | MR2 | MR3 |
|-----|------|------|------|
| MR1 | 1.00 | 0.33 | 0.41 |
| MR2 | 0.33 | 1.00 | 0.41 |
| MR3 | 0.41 | 0.41 | 1.00 |

Mean item complexity = 1.4

Test of the hypothesis that 3 factors are sufficient.

df null model = 78 with the objective function = 3.49 with Chi Square = 408.07

df of the model are 42 and the objective function was 0.52

The root mean square of the residuals (RMSR) is 0.05

The df corrected root mean square of the residuals is 0.07

The harmonic n.obs is 123 with the empirical chi square 53.74 with prob <

0.11

The total n.obs was 123.2308 with Likelihood Chi Square = 60.05 with prob
< 0.035

Tucker Lewis Index of factoring reliability = 0.896

RMSEA index = 0.058 and the 90 % confidence intervals are 0.017 0.091

BIC = -142.14

Fit based upon off diagonal values = 0.96

Measures of factor score adequacy

| | MR1 | MR2 | MR3 |
|---|------|------|------|
| Correlation of (regression) scores with factors | 0.87 | 0.89 | 0.90 |
| Multiple R square of scores with factors | 0.75 | 0.80 | 0.81 |
| Minimum correlation of possible factor scores | 0.51 | 0.59 | 0.61 |