

Appendix E: Faktoranalyse – Koordinationsstrukturen

Ergebnisse der Faktoranalyse mit SPSS 9.0:

Descriptive Statistics

| | Mean | Std. Deviation | Analysis N |
|---------|--------|-------------------|------------|
| REL1REV | 3.3171 | 1.1710 | 164 |
| REL2 | 3.5460 | 1.0579 | 164 |
| REL3 | 3.0976 | 1.1470 | 164 |
| REL4 | 3.3680 | 1.0680 | 164 |
| REL5 | 2.6646 | 1.1996 | 164 |
| REL6 | 2.9024 | 1.1682 | 164 |
| REL7 | 2.9756 | 1.1509 | 164 |
| REL8 | 3.2744 | 1.1040 | 164 |
| REL9 | 3.9512 | .8566 | 164 |
| REL10 | 3.9024 | .9797 | 164 |

Correlation Matrix

| | | REL1r | REL2 | REL3 | REL4 | REL5 | REL6 | REL7 | REL8 | REL9 | REL10 |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Correlation | REL1r | 1.000 | .098 | -.041 | .071 | .054 | -.053 | .015 | .046 | .144 | .284 |
| | REL2 | .098 | 1.000 | .451 | .204 | .114 | .247 | .032 | .050 | .385 | .324 |
| | REL3 | -.041 | .451 | 1.000 | .223 | .158 | .282 | .243 | .148 | .248 | .101 |
| | REL4 | .071 | .204 | .223 | 1.000 | .577 | .375 | .383 | .262 | .196 | .054 |
| | REL5 | .054 | .114 | .158 | .577 | 1.000 | .401 | .492 | .278 | .050 | -.002 |
| | REL6 | -.053 | .247 | .282 | .375 | .401 | 1.000 | .400 | .378 | .044 | -.116 |
| | REL7 | .015 | .032 | .243 | .383 | .492 | .400 | 1.000 | .507 | .098 | -.111 |
| | REL8 | .046 | .050 | .148 | .262 | .278 | .378 | .507 | 1.000 | .021 | -.128 |
| | REL9 | .144 | .385 | .248 | .196 | .050 | .044 | .098 | .021 | 1.000 | .608 |
| | REL10 | .284 | .324 | .101 | .054 | -.002 | -.116 | -.111 | -.128 | .608 | 1.000 |
| Sig. (1-tailed) | REL1r | | .107 | .299 | .182 | .245 | .248 | .425 | .279 | .033 | .000 |
| | REL2 | .107 | | .000 | .004 | .073 | .001 | .344 | .263 | .000 | .000 |
| | REL3 | .299 | .000 | | .002 | .022 | .000 | .001 | .029 | .001 | .098 |
| | REL4 | .182 | .004 | .002 | | .000 | .000 | .000 | .000 | .006 | .245 |
| | REL5 | .245 | .073 | .022 | .000 | | .000 | .000 | .000 | .264 | .490 |
| | REL6 | .248 | .001 | .000 | .000 | .000 | | .000 | .000 | .287 | .070 |
| | REL7 | .425 | .344 | .001 | .000 | .000 | .000 | | .000 | .105 | .079 |
| | REL8 | .279 | .263 | .029 | .000 | .000 | .000 | .000 | | .396 | .051 |
| | REL9 | .033 | .000 | .001 | .006 | .264 | .287 | .105 | .396 | | .000 |
| | REL10 | .000 | .000 | .098 | .245 | .490 | .070 | .079 | .051 | .000 | |

Covariance Matrix^a

a. Determinant = .377

KMO and Bartlett's Test^a

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .702 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 415.120 |
| | df | 45 |
| | Sig. | .000 |

a. Based on correlations

Communalities

| | Raw | | Rescaled | |
|---------|---------|------------|----------|------------|
| | Initial | Extraction | Initial | Extraction |
| REL1REV | 1.371 | 1.033 | 1.000 | .753 |
| REL2 | 1.119 | .759 | 1.000 | .679 |
| REL3 | 1.316 | .898 | 1.000 | .682 |
| REL4 | 1.141 | .596 | 1.000 | .523 |
| REL5 | 1.439 | .916 | 1.000 | .637 |
| REL6 | 1.365 | .771 | 1.000 | .565 |
| REL7 | 1.325 | .836 | 1.000 | .631 |
| REL8 | 1.219 | .536 | 1.000 | .440 |
| REL9 | .734 | .368 | 1.000 | .501 |
| REL10 | .960 | .609 | 1.000 | .634 |

Extraction Method: Principal Component Analysis.

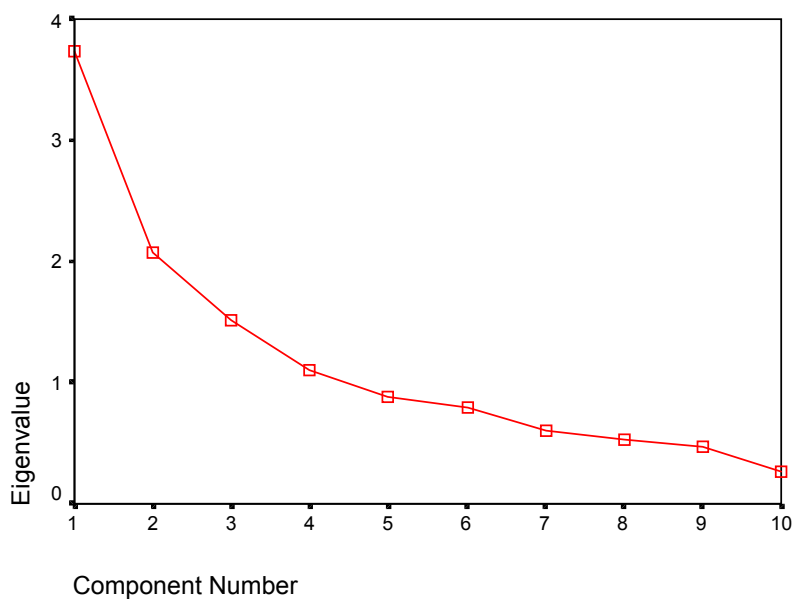
Total Variance Explained

| Component | Initial Eigenvalues ^a | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|----------------------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| Raw | | | | | | | | | |
| 1 | 3.728 | 31.103 | 31.103 | 3.728 | 31.103 | 31.103 | 3.474 | 28.984 | 28.984 |
| 2 | 2.081 | 17.357 | 48.460 | 2.081 | 17.357 | 48.460 | 2.139 | 17.841 | 46.825 |
| 3 | 1.512 | 12.617 | 61.077 | 1.512 | 12.617 | 61.077 | 1.708 | 14.253 | 61.077 |
| 4 | 1.106 | 9.227 | 70.304 | | | | | | |
| 5 | .885 | 7.383 | 77.687 | | | | | | |
| 6 | .794 | 6.625 | 84.312 | | | | | | |
| 7 | .602 | 5.023 | 89.335 | | | | | | |
| 8 | .534 | 4.455 | 93.790 | | | | | | |
| 9 | .473 | 3.942 | 97.732 | | | | | | |
| 10 | .272 | 2.268 | 100.000 | | | | | | |
| Rescaled | | | | | | | | | |
| 1 | 3.728 | 31.103 | 31.103 | 2.897 | 28.971 | 28.971 | 2.664 | 26.635 | 26.635 |
| 2 | 2.081 | 17.357 | 48.460 | 1.998 | 19.979 | 48.950 | 1.939 | 19.392 | 46.027 |
| 3 | 1.512 | 12.617 | 61.077 | 1.150 | 11.497 | 60.446 | 1.442 | 14.419 | 60.446 |
| 4 | 1.106 | 9.227 | 70.304 | | | | | | |
| 5 | .885 | 7.383 | 77.687 | | | | | | |
| 6 | .794 | 6.625 | 84.312 | | | | | | |
| 7 | .602 | 5.023 | 89.335 | | | | | | |
| 8 | .534 | 4.455 | 93.790 | | | | | | |
| 9 | .473 | 3.942 | 97.732 | | | | | | |
| 10 | .272 | 2.268 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

a. When analyzing a covariance matrix, the initial eigenvalues are the same across the raw and rescaled solution.

Scree Plot



Component Matrix^a

| | Raw | | | Rescaled | | |
|---------|-----------|------|-------|-----------|------|-------|
| | Component | | | Component | | |
| | 1 | 2 | 3 | 1 | 2 | 3 |
| REL5 | .891 | | | .742 | | |
| REL7 | .851 | | | .739 | | |
| REL6 | .831 | | | .711 | | |
| REL4 | .750 | | | .703 | | |
| REL8 | .657 | | | .595 | | |
| REL10 | | .756 | | | .771 | |
| REL9 | | .571 | | | .667 | |
| REL2 | .393 | .695 | -.349 | .371 | .657 | -.330 |
| REL1REV | | .517 | .872 | | .441 | .744 |
| REL3 | .569 | .445 | -.613 | .496 | .388 | -.535 |

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

Rotated Component Matrix^a

| | Raw | | | Rescaled | | |
|---------|-----------|------|-------|-----------|------|------|
| | Component | | | Component | | |
| | 1 | 2 | 3 | 1 | 2 | 3 |
| REL7 | .912 | | | .793 | | |
| REL5 | .944 | | | .787 | | |
| REL4 | .722 | | | .676 | | |
| REL8 | .727 | | | .658 | | |
| REL6 | .768 | | | .657 | | |
| REL2 | | .858 | | | .811 | |
| REL3 | | .881 | | | .768 | |
| REL9 | | .500 | .343 | | .584 | .400 |
| REL1REV | | | 1.009 | | | .862 |
| REL10 | | .469 | .601 | | .479 | .613 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Component Transformation Matrix

| Component | 1 | 2 | 3 |
|-----------|-------|-------|------|
| 1 | .928 | .372 | .002 |
| 2 | -.302 | .751 | .587 |
| 3 | .217 | -.546 | .809 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.