**Appendices (For review only)**

**Appendix A: Reliability statistics (pilot study)**

|  |  |  |
| --- | --- | --- |
| **Reliability Statistics** | | |
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| .635 | .653 | 40 |

**Appendix B: Reliability statistics**

|  |  |  |
| --- | --- | --- |
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| .745 | .748 | 40 |

**Appendix C: KMO & Bartlett’s test of sphericity**

|  |  |  |
| --- | --- | --- |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .813 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3154.704 |
| df | 780 |
| Sig. | .000 |

**Initial PCA (Based on Eigen Values)**

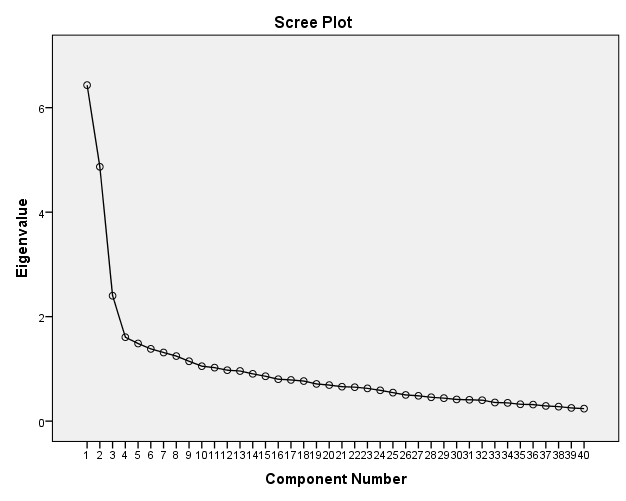
**Appendix D: Communalities**

|  |  |  |
| --- | --- | --- |
|  | Initial | Extraction |
| I1 | 1.000 | .672 |
| I2 | 1.000 | .621 |
| I3 | 1.000 | .687 |
| I4 | 1.000 | .676 |
| I5 | 1.000 | .627 |
| I6 | 1.000 | .619 |
| I7 | 1.000 | .702 |
| I8 | 1.000 | .606 |
| I9 | 1.000 | .675 |
| I10 | 1.000 | .587 |
| I11 | 1.000 | .538 |
| I12 | 1.000 | .582 |
| I13 | 1.000 | .538 |
| I14 | 1.000 | .486 |
| I15 | 1.000 | .649 |
| I16 | 1.000 | .512 |
| I17 | 1.000 | .605 |
| I18 | 1.000 | .628 |
| I19 | 1.000 | .692 |
| I20 | 1.000 | .556 |
| I21 | 1.000 | .573 |
| I22 | 1.000 | .546 |
| I23 | 1.000 | .484 |
| I24 | 1.000 | .582 |
| I25 | 1.000 | .715 |
| I26 | 1.000 | .547 |
| I27 | 1.000 | .613 |
| I28 | 1.000 | .627 |
| I29 | 1.000 | .547 |
| I30 | 1.000 | .573 |
| I31 | 1.000 | .608 |
| I32 | 1.000 | .551 |
| I33 | 1.000 | .684 |
| I34 | 1.000 | .541 |
| I35 | 1.000 | .555 |
| I36 | 1.000 | .619 |
| I37 | 1.000 | .639 |
| I38 | 1.000 | .668 |
| I39 | 1.000 | .456 |
| I40 | 1.000 | .568 |

**Appendix E: Total variance explained**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadingsa |
| Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total |
| 1 | 6.432 | 16.079 | 16.079 | 6.432 | 16.079 | 16.079 | 4.615 |
| 2 | 4.868 | 12.171 | 28.250 | 4.868 | 12.171 | 28.250 | 3.120 |
| 3 | 2.400 | 6.001 | 34.251 | 2.400 | 6.001 | 34.251 | 2.687 |
| 4 | 1.606 | 4.016 | 38.267 | 1.606 | 4.016 | 38.267 | 2.362 |
| 5 | 1.486 | 3.714 | 41.981 | 1.486 | 3.714 | 41.981 | 3.678 |
| 6 | 1.383 | 3.457 | 45.438 | 1.383 | 3.457 | 45.438 | 1.541 |
| 7 | 1.314 | 3.284 | 48.722 | 1.314 | 3.284 | 48.722 | 1.692 |
| 8 | 1.245 | 3.113 | 51.836 | 1.245 | 3.113 | 51.836 | 2.271 |
| 9 | 1.146 | 2.866 | 54.702 | 1.146 | 2.866 | 54.702 | 2.783 |
| 10 | 1.052 | 2.630 | 57.331 | 1.052 | 2.630 | 57.331 | 2.634 |
| 11 | 1.024 | 2.561 | 59.892 | 1.024 | 2.561 | 59.892 | 2.914 |
| 12 | .976 | 2.439 | 62.331 |  |  |  |  |
| 13 | .959 | 2.399 | 64.730 |  |  |  |  |
| 14 | .905 | 2.262 | 66.992 |  |  |  |  |
| 15 | .859 | 2.148 | 69.140 |  |  |  |  |
| 16 | .802 | 2.006 | 71.146 |  |  |  |  |
| 17 | .788 | 1.969 | 73.115 |  |  |  |  |
| 18 | .767 | 1.918 | 75.033 |  |  |  |  |
| 19 | .712 | 1.780 | 76.813 |  |  |  |  |
| 20 | .690 | 1.725 | 78.538 |  |  |  |  |
| 21 | .659 | 1.648 | 80.186 |  |  |  |  |
| 22 | .650 | 1.626 | 81.812 |  |  |  |  |
| 23 | .627 | 1.568 | 83.380 |  |  |  |  |
| 24 | .590 | 1.474 | 84.854 |  |  |  |  |
| 25 | .545 | 1.363 | 86.217 |  |  |  |  |
| 26 | .502 | 1.255 | 87.472 |  |  |  |  |
| 27 | .484 | 1.210 | 88.682 |  |  |  |  |
| 28 | .457 | 1.142 | 89.823 |  |  |  |  |
| 29 | .440 | 1.100 | 90.924 |  |  |  |  |
| 30 | .416 | 1.039 | 91.962 |  |  |  |  |
| 31 | .408 | 1.020 | 92.983 |  |  |  |  |
| 32 | .401 | 1.003 | 93.986 |  |  |  |  |
| 33 | .356 | .891 | 94.877 |  |  |  |  |
| 34 | .349 | .874 | 95.751 |  |  |  |  |
| 35 | .323 | .807 | 96.557 |  |  |  |  |
| 36 | .317 | .792 | 97.349 |  |  |  |  |
| 37 | .290 | .725 | 98.075 |  |  |  |  |
| 38 | .278 | .694 | 98.769 |  |  |  |  |
| 39 | .253 | .633 | 99.401 |  |  |  |  |
| 40 | .240 | .599 | 100.000 |  |  |  |  |

**Appendix F: Scree plot**



**Appendix G: Parallel Analysis**

Monte Carlo PCA for Parallel Analysis ©2000

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Eigenvalue # Random Eigenvalue Standard Dev

++++++++++++++++++++++++++++++++++++++++++++++++++++++

1 1.8598 .0584

2 1.7570 .0425

3 1.6779 .0363

4 1.6205 .0338

5 1.5555 .0330

6 1.5016 .0266

7 1.4472 .0260

8 1.4043 .0254

9 1.3619 .0264

10 1.3152 .0268

11 1.2727 .0255

12 1.2328 .0196

13 1.1968 .0181

14 1.1640 .0183

15 1.1298 .0203

16 1.0922 .0180

17 1.0581 .0182

18 1.0284 .0196

19 0.9978 .0195

20 0.9660 .0182

21 0.9361 .0176

22 0.9050 .0190

23 0.8767 .0177

24 0.8463 .0185

25 0.8181 .0180

26 0.7912 .0185

27 0.7647 .0171

28 0.7355 .0159

29 0.7090 .0181

30 0.6840 .0172

31 0.6577 .0178

32 0.6301 .0164

33 0.6028 .0183

34 0.5735 .0180

35 0.5503 .0167

36 0.5218 .0153

37 0.4909 .0169

38 0.4610 .0171

39 0.4271 .0207

40 0.3886 .0223

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Monte Carlo PCA for Parallel Analysis

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**Follow-up PCA (with four factors)**

**Appendix H: Total variance explained**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Component |  | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadingsa |
|  | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total |
| 1 |  | 6.432 | 16.079 | 16.079 | 6.432 | 16.079 | 16.079 | 5.742 |
| 2 |  | 4.868 | 12.171 | 28.250 | 4.868 | 12.171 | 28.250 | 5.054 |
| 3 |  | 2.400 | 6.001 | 34.251 | 2.400 | 6.001 | 34.251 | 2.549 |
| 4 |  | 1.606 | 4.016 | 38.267 | 1.606 | 4.016 | 38.267 | 2.705 |
| 5 |  | 1.486 | 3.714 | 41.981 |  |  |  |  |
| 6 |  | 1.383 | 3.457 | 45.438 |  |  |  |  |
| 7 |  | 1.314 | 3.284 | 48.722 |  |  |  |  |
| 8 |  | 1.245 | 3.113 | 51.836 |  |  |  |  |
| 9 |  | 1.146 | 2.866 | 54.702 |  |  |  |  |
| 10 |  | 1.052 | 2.630 | 57.331 |  |  |  |  |
| 11 |  | 1.024 | 2.561 | 59.892 |  |  |  |  |
| 12 |  | .976 | 2.439 | 62.331 |  |  |  |  |
| 13 |  | .959 | 2.399 | 64.730 |  |  |  |  |
| 14 |  | .905 | 2.262 | 66.992 |  |  |  |  |
| 15 |  | .859 | 2.148 | 69.140 |  |  |  |  |
| 16 |  | .802 | 2.006 | 71.146 |  |  |  |  |
| 17 |  | .788 | 1.969 | 73.115 |  |  |  |  |
| 18 |  | .767 | 1.918 | 75.033 |  |  |  |  |
| 19 |  | .712 | 1.780 | 76.813 |  |  |  |  |
| 20 |  | .690 | 1.725 | 78.538 |  |  |  |  |
| 21 |  | .659 | 1.648 | 80.186 |  |  |  |  |
| 22 |  | .650 | 1.626 | 81.812 |  |  |  |  |
| 23 |  | .627 | 1.568 | 83.380 |  |  |  |  |
| 24 |  | .590 | 1.474 | 84.854 |  |  |  |  |
| 25 |  | .545 | 1.363 | 86.217 |  |  |  |  |
| 26 |  | .502 | 1.255 | 87.472 |  |  |  |  |
| 27 |  | .484 | 1.210 | 88.682 |  |  |  |  |
| 28 |  | .457 | 1.142 | 89.823 |  |  |  |  |
| 29 |  | .440 | 1.100 | 90.924 |  |  |  |  |
| 30 |  | .416 | 1.039 | 91.962 |  |  |  |  |
| 31 |  | .408 | 1.020 | 92.983 |  |  |  |  |
| 32 |  | .401 | 1.003 | 93.986 |  |  |  |  |
| 33 |  | .356 | .891 | 94.877 |  |  |  |  |
| 34 |  | .349 | .874 | 95.751 |  |  |  |  |
| 35 |  | .323 | .807 | 96.557 |  |  |  |  |
| 36 |  | .317 | .792 | 97.349 |  |  |  |  |
| 37 |  | .290 | .725 | 98.075 |  |  |  |  |
| 38 |  | .278 | .694 | 98.769 |  |  |  |  |
| 39 |  | .253 | .633 | 99.401 |  |  |  |  |
| 40 |  | .240 | .599 | 100.000 |  |  |  |  |

**Appendix I: Communalities**

|  |  |  |
| --- | --- | --- |
|  | Initial | Extraction |
| I1 | 1.000 | .215 |
| I2 | 1.000 | .179 |
| I3 | 1.000 | .549 |
| I4 | 1.000 | .269 |
| I5 | 1.000 | .471 |
| I6 | 1.000 | .409 |
| I7 | 1.000 | .101 |
| I8 | 1.000 | .293 |
| I9 | 1.000 | .203 |
| I10 | 1.000 | .397 |
| I11 | 1.000 | .311 |
| I12 | 1.000 | .530 |
| I13 | 1.000 | .438 |
| I14 | 1.000 | .399 |
| I15 | 1.000 | .213 |
| I16 | 1.000 | .310 |
| I17 | 1.000 | .508 |
| I18 | 1.000 | .352 |
| I19 | 1.000 | .665 |
| I20 | 1.000 | .436 |
| I21 | 1.000 | .207 |
| I22 | 1.000 | .424 |
| I23 | 1.000 | .373 |
| I24 | 1.000 | .512 |
| I25 | 1.000 | .311 |
| I26 | 1.000 | .390 |
| I27 | 1.000 | .410 |
| I28 | 1.000 | .390 |
| I29 | 1.000 | .400 |
| I30 | 1.000 | .528 |
| I31 | 1.000 | .459 |
| I32 | 1.000 | .430 |
| I33 | 1.000 | .536 |
| I34 | 1.000 | .228 |
| I35 | 1.000 | .322 |
| I36 | 1.000 | .456 |
| I37 | 1.000 | .586 |
| I38 | 1.000 | .282 |
| I39 | 1.000 | .339 |
| I40 | 1.000 | .477 |

**Appendix G: Component Matrix**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Component | | | |
| 1 | 2 | 3 | 4 |
| I12 | .709 |  |  |  |
| I37 | .684 | .333 |  |  |
| I19 | -.670 | .411 |  |  |
| I36 | .632 |  |  |  |
| I33 | .618 | .315 |  |  |
| I20 | .600 |  |  |  |
| I17 | .575 |  |  |  |
| I14 | .558 |  |  |  |
| I32 | .554 |  |  |  |
| I31 | -.546 | .329 |  |  |
| I13 | -.511 |  | .336 |  |
| I24 | -.500 |  | .414 |  |
| I6 | .437 | .321 | -.339 |  |
| I35 | -.385 |  |  |  |
| I11 | .378 | .359 |  |  |
| I16 | -.353 |  |  | -.305 |
| I2 | .340 |  |  |  |
| I9 | .321 |  |  |  |
| I3 |  | .664 |  |  |
| I5 |  | .598 |  |  |
| I29 |  | .575 |  |  |
| I27 |  | .573 |  |  |
| I22 | .328 | .536 |  |  |
| I10 | .375 | .494 |  |  |
| I28 | -.323 | .482 |  |  |
| I38 |  | .453 |  |  |
| I26 | -.329 | .439 |  |  |
| I18 |  | .438 |  |  |
| I8 |  | .388 |  |  |
| I21 | .303 | .314 |  |  |
| I1 |  | .308 |  |  |
| I40 | .327 |  | .597 |  |
| I23 |  |  | .572 |  |
| I30 |  |  | .558 | .343 |
| I25 |  |  | .455 |  |
| I34 |  |  | .396 |  |
| I7 |  |  |  |  |
| I4 |  |  |  | -.466 |
| I15 |  |  |  | -.410 |
| I39 | -.315 | .301 |  | .386 |

**Follow-up PCA (with eight factors)**

**Appendix K: Communalities**

|  |  |  |
| --- | --- | --- |
|  | Initial | Extraction |
| I1 | 1.000 | .526 |
| I2 | 1.000 | .460 |
| I3 | 1.000 | .618 |
| I4 | 1.000 | .483 |
| I5 | 1.000 | .516 |
| I6 | 1.000 | .504 |
| I7 | 1.000 | .682 |
| I8 | 1.000 | .509 |
| I9 | 1.000 | .379 |
| I10 | 1.000 | .582 |
| I11 | 1.000 | .443 |
| I12 | 1.000 | .575 |
| I13 | 1.000 | .454 |
| I14 | 1.000 | .465 |
| I15 | 1.000 | .638 |
| I16 | 1.000 | .366 |
| I17 | 1.000 | .572 |
| I18 | 1.000 | .613 |
| I19 | 1.000 | .678 |
| I20 | 1.000 | .497 |
| I21 | 1.000 | .543 |
| I22 | 1.000 | .512 |
| I23 | 1.000 | .453 |
| I24 | 1.000 | .569 |
| I25 | 1.000 | .367 |
| I26 | 1.000 | .441 |
| I27 | 1.000 | .560 |
| I28 | 1.000 | .529 |
| I29 | 1.000 | .505 |
| I30 | 1.000 | .559 |
| I31 | 1.000 | .573 |
| I32 | 1.000 | .543 |
| I33 | 1.000 | .612 |
| I34 | 1.000 | .454 |
| I35 | 1.000 | .430 |
| I36 | 1.000 | .576 |
| I37 | 1.000 | .622 |
| I38 | 1.000 | .404 |
| I39 | 1.000 | .380 |
| I40 | 1.000 | .541 |
|  | | |

**Appendix L: Total Variance Explained**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadingsa |
| Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total |
| 1 | 6.432 | 16.079 | 16.079 | 6.432 | 16.079 | 16.079 | 5.099 |
| 2 | 4.868 | 12.171 | 28.250 | 4.868 | 12.171 | 28.250 | 4.315 |
| 3 | 2.400 | 6.001 | 34.251 | 2.400 | 6.001 | 34.251 | 2.848 |
| 4 | 1.606 | 4.016 | 38.267 | 1.606 | 4.016 | 38.267 | 2.369 |
| 5 | 1.486 | 3.714 | 41.981 | 1.486 | 3.714 | 41.981 | 3.619 |
| 6 | 1.383 | 3.457 | 45.438 | 1.383 | 3.457 | 45.438 | 1.750 |
| 7 | 1.314 | 3.284 | 48.722 | 1.314 | 3.284 | 48.722 | 2.260 |
| 8 | 1.245 | 3.113 | 51.836 | 1.245 | 3.113 | 51.836 | 2.587 |
| 9 | 1.146 | 2.866 | 54.702 |  |  |  |  |
| 10 | 1.052 | 2.630 | 57.331 |  |  |  |  |
| 11 | 1.024 | 2.561 | 59.892 |  |  |  |  |
| 12 | .976 | 2.439 | 62.331 |  |  |  |  |
| 13 | .959 | 2.399 | 64.730 |  |  |  |  |
| 14 | .905 | 2.262 | 66.992 |  |  |  |  |
| 15 | .859 | 2.148 | 69.140 |  |  |  |  |
| 16 | .802 | 2.006 | 71.146 |  |  |  |  |
| 17 | .788 | 1.969 | 73.115 |  |  |  |  |
| 18 | .767 | 1.918 | 75.033 |  |  |  |  |
| 19 | .712 | 1.780 | 76.813 |  |  |  |  |
| 20 | .690 | 1.725 | 78.538 |  |  |  |  |
| 21 | .659 | 1.648 | 80.186 |  |  |  |  |
| 22 | .650 | 1.626 | 81.812 |  |  |  |  |
| 23 | .627 | 1.568 | 83.380 |  |  |  |  |
| 24 | .590 | 1.474 | 84.854 |  |  |  |  |
| 25 | .545 | 1.363 | 86.217 |  |  |  |  |
| 26 | .502 | 1.255 | 87.472 |  |  |  |  |
| 27 | .484 | 1.210 | 88.682 |  |  |  |  |
| 28 | .457 | 1.142 | 89.823 |  |  |  |  |
| 29 | .440 | 1.100 | 90.924 |  |  |  |  |
| 30 | .416 | 1.039 | 91.962 |  |  |  |  |
| 31 | .408 | 1.020 | 92.983 |  |  |  |  |
| 32 | .401 | 1.003 | 93.986 |  |  |  |  |
| 33 | .356 | .891 | 94.877 |  |  |  |  |
| 34 | .349 | .874 | 95.751 |  |  |  |  |
| 35 | .323 | .807 | 96.557 |  |  |  |  |
| 36 | .317 | .792 | 97.349 |  |  |  |  |
| 37 | .290 | .725 | 98.075 |  |  |  |  |
| 38 | .278 | .694 | 98.769 |  |  |  |  |
| 39 | .253 | .633 | 99.401 |  |  |  |  |
| 40 | .240 | .599 | 100.000 |  |  |  |  |

**Appendix M: Component Matrix**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Component | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| I12 | .709 |  |  |  |  |  |  |  |
| I37 | .684 | .333 |  |  |  |  |  |  |
| I19 | -.670 | .411 |  |  |  |  |  |  |
| I36 | .632 |  |  |  |  |  |  | .317 |
| I33 | .618 | .315 |  |  |  |  |  |  |
| I20 | .600 |  |  |  |  |  |  |  |
| I17 | .575 |  |  |  |  |  |  |  |
| I14 | .558 |  |  |  |  |  |  |  |
| I32 | .554 |  |  |  |  |  |  |  |
| I31 | -.546 | .329 |  |  |  |  |  |  |
| I13 | -.511 |  | .336 |  |  |  |  |  |
| I24 | -.500 |  | .414 |  |  |  |  |  |
| I6 | .437 | .321 | -.339 |  |  |  |  |  |
| I35 | -.385 |  |  |  |  |  |  |  |
| I11 | .378 | .359 |  |  |  |  |  |  |
| I16 | -.353 |  |  | -.305 |  |  |  |  |
| I9 | .321 |  |  |  |  |  |  |  |
| I3 |  | .664 |  |  |  |  |  |  |
| I5 |  | .598 |  |  |  |  |  |  |
| I29 |  | .575 |  |  |  |  |  |  |
| I27 |  | .573 |  |  |  |  |  |  |
| I22 | .328 | .536 |  |  |  |  |  |  |
| I10 | .375 | .494 |  |  |  | -.334 |  |  |
| I28 | -.323 | .482 |  |  |  |  |  | .318 |
| I38 |  | .453 |  |  |  |  |  |  |
| I26 | -.329 | .439 |  |  |  |  |  |  |
| I18 |  | .438 |  |  |  |  | -.367 |  |
| I8 |  | .388 |  |  | -.364 |  |  |  |
| I40 | .327 |  | .597 |  |  |  |  |  |
| I23 |  |  | .572 |  |  |  |  |  |
| I30 |  |  | .558 | .343 |  |  |  |  |
| I25 |  |  | .455 |  |  |  |  |  |
| I34 |  |  | .396 |  |  |  |  |  |
| I4 |  |  |  | -.466 |  | .313 |  |  |
| I15 |  |  |  | -.410 | .395 |  | .328 | .375 |
| I39 | -.315 | .301 |  | .386 |  |  |  |  |
| I2 | .340 |  |  |  | .349 |  |  | -.333 |
| I7 |  |  |  |  | -.429 | .560 |  |  |
| I21 | .303 | .314 |  |  |  |  | .464 |  |
| I1 |  | .308 |  |  |  |  |  | -.486 |

**Appendix N: Pattern Matrix**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Component | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| I36 | .714 |  |  |  |  |  |  |  |
| I33 | .667 |  |  |  |  |  |  |  |
| I32 | .635 |  |  |  |  |  |  |  |
| I20 | .623 |  |  |  |  |  |  |  |
| I19 | -.571 |  |  |  |  |  |  |  |
| I37 | .561 |  |  |  |  |  |  |  |
| I12 | .386 |  |  | .313 |  |  |  |  |
| I29 | .383 |  |  |  |  |  |  |  |
| I28 |  | .698 |  |  |  |  |  |  |
| I31 |  | .697 |  |  |  |  |  |  |
| I35 |  | .589 |  |  |  |  |  |  |
| I39 |  | .546 |  |  |  |  |  |  |
| I5 |  | .494 | -.327 |  |  |  |  |  |
| I17 | .455 | -.487 |  |  |  |  |  |  |
| I30 |  |  | .706 |  |  |  |  |  |
| I23 |  |  | .667 |  |  |  |  |  |
| I40 |  |  | .472 |  |  |  |  | -.388 |
| I24 |  |  | .451 |  |  |  |  |  |
| I3 |  | .387 | -.393 |  | -.375 |  |  |  |
| I6 | .316 |  | -.375 |  |  |  |  |  |
| I13 |  | .305 | .363 |  |  |  |  |  |
| I25 |  |  | .334 |  |  |  | .332 |  |
| I4 |  |  |  | -.699 |  |  |  |  |
| I9 |  |  |  | .487 |  |  |  |  |
| I16 |  |  |  | -.304 |  |  |  |  |
| I18 |  |  |  |  | -.745 |  |  |  |
| I38 |  |  |  |  | -.533 |  |  |  |
| I10 |  |  |  | .349 | -.515 |  |  | -.303 |
| I11 |  |  |  |  | -.500 |  |  |  |
| I27 |  |  |  |  | -.496 |  |  |  |
| I22 |  |  |  |  | -.437 |  | .302 |  |
| I26 |  |  |  |  | -.386 |  |  |  |
| I7 |  |  |  |  |  | .767 |  |  |
| I15 |  |  |  |  |  | -.665 | .373 |  |
| I21 |  |  |  |  |  |  | .647 |  |
| I8 |  |  |  |  |  |  | .613 |  |
| I14 |  |  |  |  |  |  | .317 |  |
| I2 |  |  |  |  |  |  |  | -.612 |
| I34 |  |  |  |  |  |  |  | -.579 |
| I1 |  |  | -.372 |  |  |  |  | -.554 |

**Appendix O: Structure Matrix**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Component | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| I36 | .727 |  |  |  |  |  |  |  |
| I33 | .693 |  |  |  |  |  |  | -.327 |
| I37 | .668 |  |  |  | -.336 |  |  | -.328 |
| I19 | -.658 | .514 |  | -.393 |  |  |  |  |
| I20 | .657 |  |  |  |  |  |  |  |
| I32 | .637 | -.411 |  |  |  |  |  |  |
| I12 | .577 | -.416 |  | .435 |  |  |  |  |
| I14 | .397 |  |  |  | -.348 |  | .397 |  |
| I31 | -.314 | .712 |  |  |  |  |  |  |
| I28 |  | .685 |  |  |  |  |  |  |
| I35 |  | .590 |  |  |  |  |  |  |
| I17 | .543 | -.590 |  |  |  |  |  |  |
| I5 |  | .572 | -.308 |  |  |  |  |  |
| I39 |  | .543 |  |  |  |  |  |  |
| I13 | -.370 | .420 | .405 |  |  |  |  |  |
| I30 |  |  | .703 |  |  |  |  |  |
| I23 |  |  | .653 |  |  |  |  |  |
| I24 | -.403 | .396 | .479 |  |  |  |  |  |
| I6 | .402 |  | -.465 |  |  | -.330 |  | -.333 |
| I40 |  | -.323 | .420 |  |  |  |  | -.407 |
| I4 |  |  |  | -.686 |  |  |  |  |
| I9 |  |  |  | .492 |  |  |  |  |
| I16 | -.350 |  |  | -.379 |  |  | .306 |  |
| I18 |  |  |  |  | -.704 |  |  |  |
| I10 |  |  |  | .363 | -.569 |  |  | -.414 |
| I27 |  | .437 |  | -.338 | -.541 |  |  |  |
| I38 |  | .317 |  |  | -.539 |  |  |  |
| I22 |  |  |  |  | -.534 |  | .413 | -.352 |
| I11 | .322 |  |  |  | -.517 |  | .331 |  |
| I3 |  | .441 | -.436 |  | -.515 |  |  |  |
| I29 | .343 |  |  |  | -.440 |  |  | -.330 |
| I26 |  | .339 |  | -.314 | -.415 |  |  |  |
| I7 |  |  |  |  |  | .746 |  |  |
| I15 |  |  |  |  |  | -.661 | .332 |  |
| I21 |  |  |  |  |  |  | .641 |  |
| I8 |  |  |  |  |  |  | .639 |  |
| I25 |  |  | .345 |  |  |  | .369 |  |
| I2 |  |  |  |  |  |  |  | -.623 |
| I34 |  |  |  |  |  |  |  | -.574 |
| I1 |  |  | -.371 |  |  |  |  | -.564 |

**Follow-up PCA (with six factors)**

**Appendix P: Communalities**

|  |  |  |
| --- | --- | --- |
|  | Initial | Extraction |
| I1 | 1.000 | .537 |
| I2 | 1.000 | .438 |
| I3 | 1.000 | .631 |
| I5 | 1.000 | .506 |
| I6 | 1.000 | .455 |
| I8 | 1.000 | .445 |
| I10 | 1.000 | .448 |
| I11 | 1.000 | .443 |
| I12 | 1.000 | .534 |
| I13 | 1.000 | .458 |
| I14 | 1.000 | .476 |
| I15 | 1.000 | .523 |
| I17 | 1.000 | .484 |
| I18 | 1.000 | .573 |
| I19 | 1.000 | .658 |
| I20 | 1.000 | .472 |
| I21 | 1.000 | .404 |
| I22 | 1.000 | .469 |
| I23 | 1.000 | .444 |
| I24 | 1.000 | .560 |
| I26 | 1.000 | .382 |
| I27 | 1.000 | .439 |
| I28 | 1.000 | .515 |
| I29 | 1.000 | .450 |
| I30 | 1.000 | .551 |
| I31 | 1.000 | .567 |
| I32 | 1.000 | .504 |
| I33 | 1.000 | .632 |
| I34 | 1.000 | .489 |
| I35 | 1.000 | .376 |
| I36 | 1.000 | .566 |
| I37 | 1.000 | .618 |
| I38 | 1.000 | .371 |
| I40 | 1.000 | .530 |

**Appendix Q: Component Matrix**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Component | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| I37 | .709 |  |  |  |  |  |
| I12 | .691 |  |  |  |  |  |
| I33 | .646 |  |  | .320 |  |  |
| I36 | .638 |  |  |  |  |  |
| I19 | -.624 | .467 |  |  |  |  |
| I20 | .617 |  |  |  |  |  |
| I14 | .576 |  |  |  |  |  |
| I17 | .573 | -.328 |  |  |  |  |
| I32 | .540 | -.350 |  |  |  |  |
| I31 | -.520 | .376 |  | .316 |  |  |
| I13 | -.485 |  | .367 |  |  |  |
| I24 | -.467 | .313 | .462 |  |  |  |
| I6 | .460 | .316 |  |  |  |  |
| I11 | .414 | .309 |  |  |  |  |
| I2 | .366 |  |  |  | .355 |  |
| I35 | -.364 | .320 |  |  |  |  |
| I3 |  | .671 |  |  |  |  |
| I5 |  | .625 |  |  |  |  |
| I27 |  | .616 |  |  |  |  |
| I29 |  | .560 |  |  |  |  |
| I28 |  | .524 |  |  |  |  |
| I22 | .370 | .501 |  |  |  |  |
| I10 | .405 | .464 |  |  |  |  |
| I26 |  | .460 |  |  |  |  |
| I38 |  | .457 |  |  | -.326 |  |
| I23 |  |  | .602 |  |  |  |
| I30 |  |  | .599 |  |  |  |
| I40 | .339 |  | .573 |  |  |  |
| I34 |  |  | .409 |  | .339 | -.330 |
| I18 | .302 | .422 |  | -.449 |  |  |
| I8 |  | .363 |  | -.372 | .300 |  |
| I21 | .337 |  |  |  | .337 |  |
| I1 | .312 |  |  |  |  | -.562 |
| I15 |  |  |  |  | .440 | .524 |

**Appendix R: Pattern Matrix**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Component | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| I31 | .792 |  |  |  |  |  |
| I28 | .786 |  |  |  |  |  |
| I5 | .608 |  |  | -.304 |  |  |
| I27 | .599 |  |  |  |  |  |
| I35 | .587 |  | -.351 |  |  |  |
| I19 | .544 | -.495 |  |  |  |  |
| I17 | -.528 |  |  |  |  |  |
| I13 | .471 |  |  | .399 |  |  |
| I3 | .458 | .314 |  | -.337 |  |  |
| I24 | .450 |  |  | .442 |  |  |
| I26 | .447 |  |  |  |  |  |
| I12 | -.405 | .355 |  |  |  |  |
| I33 |  | .751 |  |  |  |  |
| I36 |  | .683 |  |  |  |  |
| I37 |  | .631 |  |  |  |  |
| I20 |  | .592 |  |  |  |  |
| I32 | -.374 | .519 |  |  |  |  |
| I29 | .395 | .444 |  |  |  |  |
| I6 |  | .440 |  | -.352 |  |  |
| I18 |  |  | .851 |  |  |  |
| I11 |  |  | .670 |  |  |  |
| I22 |  |  | .523 |  |  |  |
| I14 |  |  | .500 |  |  |  |
| I38 | .343 |  | .429 |  |  |  |
| I10 |  |  | .417 |  |  |  |
| I8 |  | -.309 | .417 |  |  | .359 |
| I30 |  |  |  | .743 |  |  |
| I23 |  |  |  | .694 |  |  |
| I1 |  |  |  | -.448 | .446 |  |
| I34 |  |  |  |  | .753 |  |
| I2 |  |  |  |  | .633 |  |
| I40 |  |  |  | .425 | .506 |  |
| I15 |  |  |  |  |  | .741 |
| I21 |  |  |  |  |  | .519 |