

TWENTY FOUR PSYCHOLOGICAL TESTS
 Rotated Principal Components
 4 factors retained

Rotated Factor Pattern

Variable	Factor1	Factor2	Factor3	Factor4	
TEST01	0.15661	0.71288	0.22578	0.14209	Visual Perception
TEST02	0.08687	0.59303	0.08143	0.02859	Cubes
TEST03	0.14280	0.66214	-0.04220	0.10761	Paper Form Board
TEST04	0.24762	0.61734	0.08861	0.02638	Flags
TEST05	0.78616	0.15256	0.21802	0.11214	General Information
TEST06	0.80579	0.17751	0.06885	0.20575	Paragraph Comprehension
TEST07	0.84974	0.15009	0.15018	0.05560	Sentence Completion
TEST08	0.64019	0.31128	0.23867	0.10586	Word Classification
TEST09	0.84160	0.16474	0.05571	0.19377	Word Meaning
TEST10	0.17870	-0.13210	0.83285	0.12279	Addition
TEST11	0.18386	0.04613	0.62838	0.36709	Code
TEST12	0.01786	0.16715	0.79669	0.05320	Counting Dots
TEST13	0.18366	0.41314	0.62401	0.03395	Straight-Curved Capitals
TEST14	0.23338	-0.01149	0.05815	0.68024	Word Recognition
TEST15	0.11563	0.07910	0.04834	0.67362	Number Recognition
TEST16	0.06073	0.45696	0.04762	0.58201	Figure Recognition
TEST17	0.14368	0.01000	0.24248	0.67597	Object - Number
TEST18	-0.01555	0.32043	0.39893	0.49512	Number - Figure
TEST19	0.13555	0.25131	0.19694	0.42071	Figure - Word
TEST20	0.43235	0.43367	0.08946	0.29590	Deduction
TEST21	0.18016	0.41991	0.50307	0.17037	Numerical Puzzles
TEST22	0.41646	0.41317	0.12994	0.29070	Problem Reasoning
TEST23	0.41607	0.52496	0.24569	0.20322	Series Completion
TEST24	0.40142	0.14411	0.54923	0.25573	Arithmetic Problems

MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS

Rotated Factor Pattern

Variable	Factor1	Factor2	Factor3	Factor4	
TEST01	0.16024	0.68934	0.18691	0.16044	Visual Perception
TEST02	0.11715	0.43585	0.08321	0.09642	Cubes
TEST03	0.13667	0.57036	-0.01949	0.10999	Paper Form Board
TEST04	0.23341	0.52735	0.09895	0.08015	Flags
TEST05	0.73881	0.18506	0.21316	0.14991	General Information
TEST06	0.76672	0.20456	0.06630	0.23322	Paragraph Comprehension
TEST07	0.80601	0.19684	0.15289	0.07496	Sentence Completion
TEST08	0.56935	0.33851	0.24195	0.13171	Word Classification
TEST09	0.80617	0.20116	0.04055	0.22670	Word Meaning
TEST10	0.16739	-0.11824	0.83095	0.16641	Addition
TEST11	0.17966	0.11994	0.51230	0.37409	Code
TEST12	0.01883	0.21023	0.71599	0.08831	Counting Dots
TEST13	0.18751	0.43775	0.52520	0.08176	Straight-Curved Capitals
TEST14	0.19729	0.04962	0.08158	0.55315	Word Recognition
TEST15	0.12177	0.11623	0.07421	0.51975	Number Recognition
TEST16	0.06858	0.40780	0.06236	0.52539	Figure Recognition
TEST17	0.14201	0.06173	0.21950	0.57419	Object - Number
TEST18	0.02591	0.29327	0.33622	0.45566	Number - Figure
TEST19	0.14828	0.23916	0.16113	0.36517	Figure - Word
TEST20	0.37748	0.40163	0.11813	0.30105	Deduction
TEST21	0.17457	0.38064	0.43833	0.22270	Numerical Puzzles
TEST22	0.36624	0.39881	0.12254	0.30129	Problem Reasoning
TEST23	0.36863	0.50038	0.24372	0.23890	Series Completion
TEST24	0.36979	0.15751	0.49636	0.30380	Arithmetic Problems

MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 Rotated Factor Pattern (Standardized Regression Coefficients)

Variable	Factor1	Factor2	Factor3	Factor4	
TEST01	-0.00981	0.72871	0.07022	-0.00921	Visual Perception
TEST02	0.01837	0.46193	0.00361	-0.00764	Cubes
TEST03	0.02580	0.62532	-0.13625	-0.00101	Paper Form Board
TEST04	0.13688	0.54567	-0.00272	-0.06822	Flags
TEST05	0.77405	-0.00025	0.10043	-0.02880	General Information
TEST06	0.80917	0.01584	-0.08643	0.09045	Paragraph Comprehension
TEST07	0.87273	0.01993	0.03473	-0.11992	Sentence Completion
TEST08	0.54181	0.22037	0.13577	-0.05666	Word Classification
TEST09	0.86118	0.00697	-0.11893	0.08159	Word Meaning
TEST10	0.07245	-0.30061	0.91104	0.02780	Addition
TEST11	0.04637	-0.02803	0.47996	0.28854	Code
TEST12	-0.14017	0.15011	0.76653	-0.08078	Counting Dots
TEST13	0.03983	0.40355	0.49889	-0.12484	Straight-Curved Capitals
TEST14	0.11182	-0.10448	-0.03153	0.59688	Word Recognition
TEST15	0.01609	-0.00106	-0.03421	0.55875	Number Recognition
TEST16	-0.10632	0.35664	-0.08238	0.51994	Figure Recognition
TEST17	0.02065	-0.09672	0.12660	0.60190	Object - Number
TEST18	-0.15978	0.21486	0.26130	0.41296	Number - Figure
TEST19	0.03680	0.15999	0.07021	0.32931	Figure - Word
TEST20	0.29052	0.31818	-0.01843	0.18992	Deduction
TEST21	0.02386	0.32015	0.38605	0.07313	Numerical Puzzles
TEST22	0.27718	0.31685	-0.01169	0.19185	Problem Reasoning
TEST23	0.25260	0.43601	0.12203	0.07353	Series Completion
TEST24	0.27721	-0.01074	0.44515	0.16775	Arithmetic Problems

MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 Rotation Method: Promax (power = 3)
 Factor Structure (Correlations)

Variable	Factor1	Factor2	Factor3	Factor4	
TEST01	0.36924	0.74685	0.34572	0.36434	Visual Perception
TEST02	0.24176	0.46866	0.18710	0.22233	Cubes
TEST03	0.27704	0.58444	0.11663	0.24843	Paper Form Board
TEST04	0.37099	0.57893	0.23315	0.25296	Flags
TEST05	0.80021	0.40290	0.39159	0.36896	General Information
TEST06	0.82427	0.42025	0.27741	0.42944	Paragraph Comprehension
TEST07	0.84132	0.40230	0.33227	0.30352	Sentence Completion
TEST08	0.67681	0.51064	0.40923	0.35568	Word Classification
TEST09	0.85514	0.41990	0.25797	0.42576	Word Meaning
TEST10	0.29619	0.10231	0.83484	0.31982	Addition
TEST11	0.35296	0.31867	0.61461	0.50820	Code
TEST12	0.19722	0.34135	0.73421	0.26500	Counting Dots
TEST13	0.37569	0.55756	0.61637	0.30571	Straight-Curved Capitals
TEST14	0.32106	0.22208	0.23518	0.58427	Word Recognition
TEST15	0.25735	0.25958	0.21830	0.55050	Number Recognition
TEST16	0.27289	0.52031	0.24405	0.60486	Figure Recognition
TEST17	0.29808	0.24924	0.36274	0.62115	Object - Number
TEST18	0.23632	0.43515	0.46438	0.55762	Number - Figure
TEST19	0.29287	0.36208	0.29222	0.45329	Figure - Word
TEST20	0.52533	0.54325	0.30322	0.46601	Deduction
TEST21	0.36512	0.51676	0.55221	0.40687	Numerical Puzzles
TEST22	0.51487	0.53896	0.30506	0.46419	Problem Reasoning
TEST23	0.54692	0.64178	0.42325	0.45040	Series Completion
TEST24	0.52339	0.37757	0.62387	0.48572	Arithmetic Problems

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1      ****;
2      * harmfact.sas -- Maximum Likelihood Factor Analysis      *;
3      * SEE HARMAN, Harry H., MODERN FACTOR ANALYSIS, 2ND ED      *;
4      * University of Chicago Press [1967], 508 pp.      *;
5      ****;
6      dm "output;clear;log;clear";
7      options ps=56 ls=99 nocenter nodate nonumber nolabel;
8
9      ods html style=minimal File='C:\EXST7037\Factor\SAS examples\Harmon01.html';
NOTE: Writing HTML Body file: C:\EXST7037\Factor\SAS examples\Harmon01.html
10     TITLE1 'TWENTY FOUR PSYCHOLOGICAL TESTS';
11
12    /* Input the Correlation Matrix directly */
13    /* Note the TYPE=CORR option in the DATA statement */
14
15    DATA PSYCH24(TYPE=CORR);
16        INPUT _NAME_ $ TEST1-TEST24;
17        IF _N_=1 THEN _TYPE_='N'      ';
18        ELSE _TYPE_='CORR';
19        LABEL
20            TEST1='VISUAL PERCEPTION'          TEST2='CUBES'
21            TEST3='PAPER FORM BOARD'         TEST4='FLAGS'
22            TEST5='GENERAL INFORMATION'     TEST6='PARAGRAPH COMPREHENSION'
23            TEST7='SENTENCE COMPLETION'     TEST8='WORD CLASSIFICATION'
24            TEST9='WORD MEANING'           TEST10='ADDITION'
25            TEST11='CODE'                 TEST12='COUNTING DOTS'
26            TEST13='STRAIGHT-CURVED CAPITALS' TEST14='WORD RECOGNITION'
27            TEST15='NUMBER RECOGNITION'     TEST16='FIGURE RECOGNITION'
28            TEST17='OBJECT - NUMBER'       TEST18='NUMBER - FIGURE'
29            TEST19='FIGURE - WORD'         TEST20='DEDUCTION'
30            TEST21='NUMERICAL PUZZLES'     TEST22='PROBLEM REASONING'
31            TEST23='SERIES COMPLETION'     TEST24='ARITHMETIC PROBLEMS';
32        DATALINES;
NOTE: SAS went to a new line when INPUT statement reached past the end of a line.
NOTE: The data set WORK.PSYCH24 has 25 observations and 26 variables.
NOTE: DATA statement used (Total process time):
      real time          0.01 seconds
      cpu time          0.01 seconds
158      ;
159
160      PROC PRINT DATA=PSYCH24;
161      RUN;
NOTE: There were 25 observations read from the data set WORK.PSYCH24.
NOTE: The PROCEDURE PRINT printed pages 1-2.
NOTE: PROCEDURE PRINT used (Total process time):
      real time          0.14 seconds
      cpu time          0.06 seconds
162
163      /* Use PROC FACTOR to perform an exploratory analysis      */
164      /* Since we have input a correlation matrix, PROC FACTOR      */
165      /* will know what variables to include in the analysis.      */
166
167      TITLE2 "Rotated Principal Components";
168      TITLE3 "4 factors retained";
169      PROC FACTOR DATA=PSYCH24 METHOD=prin NFACT=4 SCREE EV ROTATE=VARIMAX;
170      RUN;
NOTE: The means of one or more variables in the input data set WORK.PSYCH24 are missing and
are assumed to be 0.
NOTE: The standard deviations of one or more variables in the input data set WORK.PSYCH24 are
missing and are assumed to be 1.
NOTE: 4 factors will be retained by the NFACTOR criterion.
NOTE: The PROCEDURE FACTOR printed pages 3-8.
NOTE: PROCEDURE FACTOR used (Total process time):
      real time          0.12 seconds
      cpu time          0.09 seconds

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TWENTY FOUR PSYCHOLOGICAL TESTS

Obs	<u>NAME</u>	TEST1	TEST2	TEST3	TEST4	TEST5	TEST6	TEST7	TEST8
1	DF	146.000	146.000	146.000	146.000	146.000	146.000	146.000	146.000
2	TEST1	1.000	0.318	0.403	0.468	0.321	0.335	0.304	0.332
3	TEST2	0.318	1.000	0.317	0.230	0.285	0.234	0.157	0.157
4	TEST3	0.403	0.317	1.000	0.305	0.247	0.268	0.223	0.382
5	TEST4	0.468	0.230	0.305	1.000	0.227	0.327	0.335	0.391
6	TEST5	0.321	0.285	0.247	0.227	1.000	0.622	0.656	0.578
7	TEST6	0.335	0.234	0.268	0.327	0.622	1.000	0.722	0.527
8	TEST7	0.304	0.157	0.223	0.335	0.656	0.722	1.000	0.619
9	TEST8	0.332	0.157	0.382	0.391	0.578	0.527	0.619	1.000
10	TEST9	0.326	0.195	0.184	0.325	0.723	0.714	0.685	0.532
11	TEST10	0.116	0.057	-0.075	0.099	0.311	0.203	0.246	0.285
12	TEST11	0.308	0.150	0.091	0.110	0.344	0.353	0.232	0.300
13	TEST12	0.314	0.145	0.140	0.160	0.215	0.095	0.181	0.271
14	TEST13	0.489	0.239	0.321	0.327	0.344	0.309	0.345	0.395
15	TEST14	0.125	0.103	0.177	0.066	0.280	0.292	0.236	0.252
16	TEST15	0.238	0.131	0.065	0.127	0.229	0.251	0.172	0.175
17	TEST16	0.414	0.272	0.263	0.322	0.187	0.291	0.180	0.296
18	TEST17	0.176	0.005	0.177	0.187	0.208	0.273	0.228	0.255
19	TEST18	0.368	0.255	0.211	0.251	0.263	0.167	0.159	0.250
20	TEST19	0.270	0.112	0.312	0.137	0.190	0.251	0.226	0.274
21	TEST20	0.365	0.292	0.297	0.339	0.398	0.435	0.451	0.427
22	TEST21	0.369	0.306	0.165	0.349	0.318	0.263	0.314	0.362
23	TEST22	0.413	0.232	0.250	0.380	0.441	0.386	0.396	0.357
24	TEST23	0.474	0.348	0.383	0.335	0.435	0.431	0.405	0.501
25	TEST24	0.282	0.211	0.203	0.248	0.420	0.433	0.437	0.388
Obs	TEST9	TEST10	TEST11	TEST12	TEST13	TEST14	TEST15	TEST16	TEST17
1	146.000	146.000	146.000	146.000	146.000	146.000	146.000	146.000	146.000
2	0.326	0.116	0.308	0.314	0.489	0.125	0.238	0.414	0.176
3	0.195	0.057	0.150	0.145	0.239	0.103	0.131	0.272	0.005
4	0.184	-0.075	0.091	0.140	0.321	0.177	0.065	0.263	0.177
5	0.325	0.099	0.110	0.160	0.327	0.066	0.127	0.322	0.187
6	0.723	0.311	0.344	0.215	0.344	0.280	0.229	0.187	0.208
7	0.714	0.203	0.353	0.095	0.309	0.292	0.251	0.291	0.273
8	0.685	0.246	0.232	0.181	0.345	0.236	0.172	0.180	0.228
9	0.532	0.285	0.300	0.271	0.395	0.252	0.175	0.296	0.255
10	1.000	0.170	0.280	0.113	0.280	0.260	0.248	0.242	0.274
11	0.170	1.000	0.484	0.585	0.408	0.172	0.154	0.124	0.289
12	0.280	0.484	1.000	0.428	0.535	0.350	0.240	0.314	0.362
13	0.113	0.585	0.428	1.000	0.512	0.131	0.173	0.119	0.278
14	0.280	0.408	0.535	0.512	1.000	0.195	0.139	0.281	0.194
15	0.260	0.172	0.350	0.131	0.195	1.000	0.370	0.412	0.341
16	0.248	0.154	0.240	0.173	0.139	0.370	1.000	0.325	0.345
17	0.242	0.124	0.314	0.119	0.281	0.412	0.325	1.000	0.324
18	0.274	0.289	0.362	0.278	0.194	0.341	0.345	0.324	1.000
19	0.208	0.317	0.350	0.349	0.323	0.201	0.334	0.344	0.448
20	0.274	0.190	0.290	0.110	0.263	0.206	0.192	0.258	0.324
21	0.446	0.173	0.202	0.246	0.241	0.302	0.272	0.388	0.262
22	0.266	0.405	0.399	0.355	0.425	0.183	0.232	0.348	0.173
23	0.483	0.160	0.304	0.193	0.279	0.243	0.246	0.283	0.273
24	0.504	0.262	0.251	0.350	0.382	0.242	0.256	0.360	0.287
25	0.424	0.531	0.412	0.414	0.358	0.304	0.165	0.262	0.326
Obs	TEST18	TEST19	TEST20	TEST21	TEST22	TEST23	TEST24	_TYPE_	
1	146.000	146.000	146.000	146.000	146.000	146.000	146.000	N	
2	0.368	0.270	0.365	0.369	0.413	0.474	0.282	CORR	
3	0.255	0.112	0.292	0.306	0.232	0.348	0.211	CORR	
4	0.211	0.312	0.297	0.165	0.250	0.383	0.203	CORR	
5	0.251	0.137	0.339	0.349	0.380	0.335	0.248	CORR	
6	0.263	0.190	0.398	0.318	0.441	0.435	0.420	CORR	
7	0.167	0.251	0.435	0.263	0.386	0.431	0.433	CORR	
8	0.159	0.226	0.451	0.314	0.396	0.405	0.437	CORR	
9	0.250	0.274	0.427	0.362	0.357	0.501	0.388	CORR	
10	0.208	0.274	0.446	0.266	0.483	0.504	0.424	CORR	
11	0.317	0.190	0.173	0.405	0.160	0.262	0.531	CORR	
12	0.350	0.290	0.202	0.399	0.304	0.251	0.412	CORR	
13	0.349	0.110	0.246	0.355	0.193	0.350	0.414	CORR	
14	0.323	0.263	0.241	0.425	0.279	0.382	0.358	CORR	
15	0.201	0.206	0.302	0.183	0.243	0.242	0.304	CORR	
16	0.334	0.192	0.272	0.232	0.246	0.256	0.165	CORR	
17	0.344	0.258	0.388	0.348	0.283	0.360	0.262	CORR	
18	0.448	0.324	0.262	0.173	0.273	0.287	0.326	CORR	
19	1.000	0.358	0.301	0.357	0.317	0.272	0.405	CORR	
20	0.358	1.000	0.167	0.331	0.342	0.303	0.374	CORR	
21	0.301	0.167	1.000	0.413	0.463	0.509	0.366	CORR	
22	0.357	0.331	0.413	1.000	0.374	0.451	0.448	CORR	
23	0.317	0.342	0.463	0.374	1.000	0.503	0.375	CORR	
24	0.272	0.303	0.509	0.451	0.503	1.000	0.434	CORR	
25	0.405	0.374	0.366	0.448	0.375	0.434	1.000	CORR	

TWENTY FOUR PSYCHOLOGICAL TESTS

Rotated Principal Components

4 factors retained

The FACTOR Procedure

Initial Factor Method: Principal Components

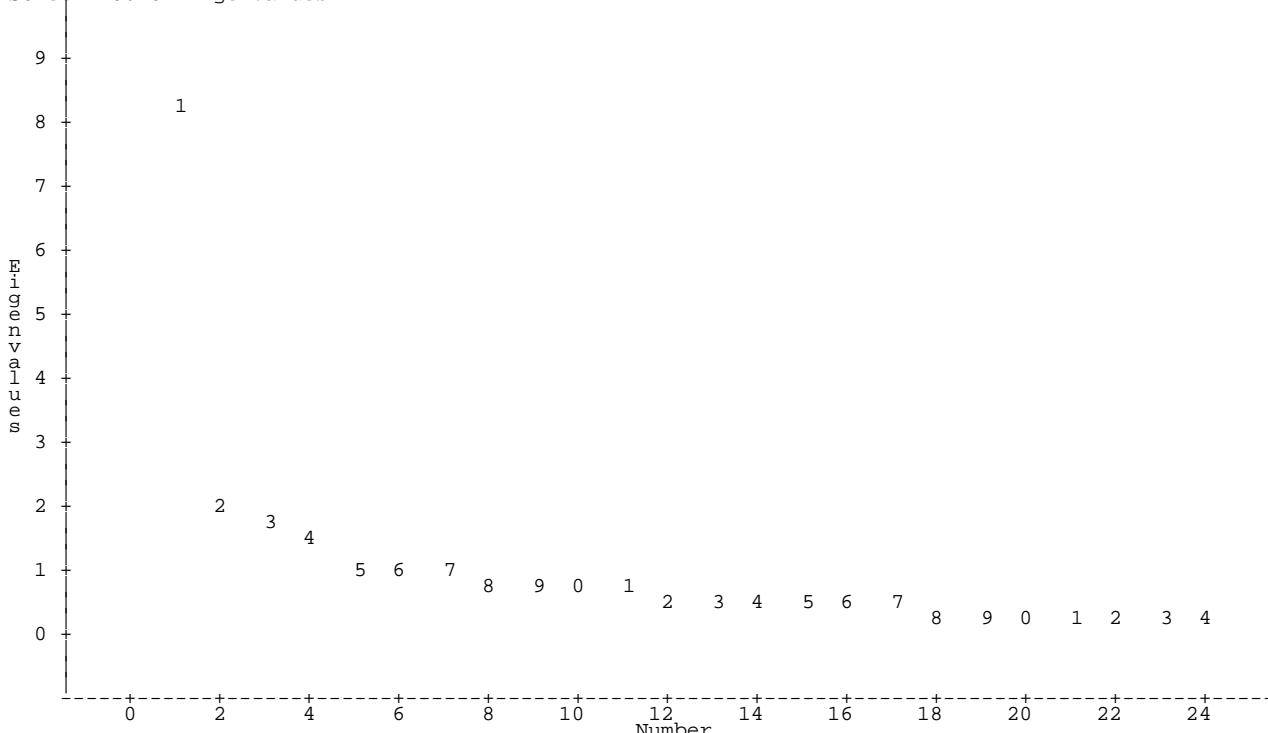
Prior Communality Estimates: ONE

Eigenvalues of the Correlation Matrix: Total = 24 Average = 1

	Eigenvalue	Difference	Proportion	Cumulative
1	8.13544408	6.03940333	0.3390	0.3390
2	2.09604075	0.40343587	0.0873	0.4263
3	1.69260488	0.19077059	0.0705	0.4968
4	1.50183430	0.47662989	0.0626	0.5594
5	1.02520440	0.08226789	0.0427	0.6021
6	0.94293652	0.04171957	0.0393	0.6414
7	0.90121694	0.08527205	0.0376	0.6790
8	0.81594489	0.02572631	0.0340	0.7130
9	0.79021859	0.08335155	0.0329	0.7459
10	0.70686703	0.06750030	0.0295	0.7753
11	0.63936673	0.09605833	0.0266	0.8020
12	0.54330841	0.01026867	0.0226	0.8246
13	0.53303974	0.02361327	0.0222	0.8468
14	0.50942647	0.03196344	0.0212	0.8681
15	0.47746303	0.08772837	0.0199	0.8880
16	0.38973466	0.00777072	0.0162	0.9042
17	0.38196394	0.04159895	0.0159	0.9201
18	0.34036499	0.00658629	0.0142	0.9343
19	0.33377870	0.01802676	0.0139	0.9482
20	0.31575194	0.01855391	0.0132	0.9614
21	0.29719803	0.02906543	0.0124	0.9737
22	0.26813260	0.07846885	0.0112	0.9849
23	0.18966375	0.01716915	0.0079	0.9928
24	0.17249461		0.0072	1.0000

4 factors will be retained by the NFACTOR criterion.

Scree Plot of Eigenvalues



TWENTY FOUR PSYCHOLOGICAL TESTS

Rotated Principal Components

4 factors retained

The FACTOR Procedure

Initial Factor Method: Principal Components

	Eigenvectors			
	1	2	3	4
TEST1	0.21588	-0.00376	0.32875	-0.16685
TEST2	0.14011	-0.05485	0.30751	-0.16446
TEST3	0.15587	-0.13181	0.36614	-0.08630
TEST4	0.17898	-0.12294	0.25729	-0.17621
TEST5	0.24364	-0.22195	-0.25774	-0.04309
TEST6	0.24206	-0.28846	-0.20378	0.06579
TEST7	0.23730	-0.29349	-0.27319	-0.05917
TEST8	0.24336	-0.16772	-0.11036	-0.09493
TEST9	0.24345	-0.31122	-0.22351	0.06499
TEST10	0.16622	0.37421	-0.34305	-0.16446
TEST11	0.20204	0.29963	-0.16148	0.02757
TEST12	0.16908	0.37915	-0.09735	-0.27775
TEST13	0.21668	0.19274	0.02724	-0.29855
TEST14	0.15704	0.06395	-0.04238	0.45320
TEST15	0.14572	0.09831	0.06024	0.42914
TEST16	0.18712	0.06282	0.30098	0.26697
TEST17	0.17096	0.19030	-0.04029	0.38276
TEST18	0.19061	0.26684	0.15243	0.12392
TEST19	0.16669	0.09522	0.09373	0.15777
TEST20	0.22544	-0.12872	0.10154	0.05720
TEST21	0.21791	0.16044	0.07670	-0.16458
TEST22	0.22422	-0.10072	0.08481	0.04537
TEST23	0.24949	-0.07245	0.11493	-0.08402
TEST24	0.23581	0.13524	-0.17931	-0.05043

	Factor Pattern			
	Factor1	Factor2	Factor3	Factor4
TEST1	0.61573	-0.00545	0.42770	-0.20447
TEST2	0.39962	-0.07941	0.40007	-0.20155
TEST3	0.44460	-0.19083	0.47635	-0.10576
TEST4	0.51051	-0.17798	0.33474	-0.21594
TEST5	0.69494	-0.32133	-0.33532	-0.05281
TEST6	0.69043	-0.41763	-0.26511	0.08063
TEST7	0.67683	-0.42491	-0.35542	-0.07252
TEST8	0.69412	-0.24282	-0.14358	-0.11634
TEST9	0.69438	-0.45058	-0.29079	0.07965
TEST10	0.47411	0.54177	-0.44630	-0.20155
TEST11	0.57628	0.43379	-0.21008	0.03378
TEST12	0.48227	0.54892	-0.12665	-0.34038
TEST13	0.61803	0.27905	0.03544	-0.36587
TEST14	0.44791	0.09258	-0.05514	0.55540
TEST15	0.41563	0.14233	0.07837	0.52591
TEST16	0.53373	0.09095	0.39158	0.32717
TEST17	0.48763	0.27551	-0.05241	0.46907
TEST18	0.54366	0.38632	0.19832	0.15187
TEST19	0.47546	0.13785	0.12194	0.19335
TEST20	0.64302	-0.18635	0.13210	0.07009
TEST21	0.62153	0.23228	0.09979	-0.20170
TEST22	0.63954	-0.14582	0.11034	0.05560
TEST23	0.71162	-0.10489	0.14952	-0.10296
TEST24	0.67259	0.19579	-0.23328	-0.06180

Variance Explained by Each Factor				
Factor1	Factor2	Factor3	Factor4	
8.1354441	2.0960408	1.6926049	1.5018343	

Final Communality Estimates: Total = 13.425924

TEST1	TEST2	TEST3	TEST4	TEST5	TEST6	TEST7	TEST8
0.60389472	0.36668324	0.47217872	0.45097622	0.70142247	0.72788633	0.77022686	0.57491108
TEST9	TEST10	TEST11	TEST12	TEST13	TEST14	TEST15	TEST16
0.77608730	0.75810464	0.56555180	0.66579666	0.59495177	0.52070335	0.47573202	0.55350817
TEST17	TEST18	TEST19	TEST20	TEST21	TEST22	TEST23	TEST24
0.53647167	0.50720884	0.29731639	0.47056001	0.49089020	0.44554692	0.55035982	0.54895480

TWENTY FOUR PSYCHOLOGICAL TESTS

Rotated Principal Components

4 factors retained

The FACTOR Procedure

Rotation Method: Varimax

Orthogonal Transformation Matrix

	1	2	3	4
1	0.59909	0.50283	0.45822	0.42224
2	-0.61781	-0.15549	0.71650	0.28419
3	-0.50921	0.78689	-0.32162	0.13443
4	-0.01051	-0.32216	-0.41620	0.85022

Rotated Factor Pattern

	Factor1	Factor2	Factor3	Factor4
TEST1	0.15661	0.71288	0.22578	0.14209
TEST2	0.08687	0.59303	0.08143	0.02859
TEST3	0.14280	0.66214	-0.04220	0.10761
TEST4	0.24762	0.61734	0.08861	0.02638
TEST5	0.78616	0.15256	0.21802	0.11214
TEST6	0.80579	0.17751	0.06885	0.20575
TEST7	0.84974	0.15009	0.15018	0.05560
TEST8	0.64019	0.31128	0.23867	0.10586
TEST9	0.84160	0.16474	0.05571	0.19377
TEST10	0.17870	-0.13210	0.83285	0.12279
TEST11	0.18386	0.04613	0.62838	0.36709
TEST12	0.01786	0.16715	0.79669	0.05320
TEST13	0.18366	0.41314	0.62401	0.03395
TEST14	0.23338	-0.01149	0.05815	0.68024
TEST15	0.11563	0.07910	0.04834	0.67362
TEST16	0.06073	0.45696	0.04762	0.58201
TEST17	0.14368	0.01000	0.24248	0.67597
TEST18	-0.01555	0.32043	0.39893	0.49512
TEST19	0.13555	0.25131	0.19694	0.42071
TEST20	0.43235	0.43367	0.08946	0.29590
TEST21	0.18016	0.41991	0.50307	0.17037
TEST22	0.41646	0.41317	0.12994	0.29070
TEST23	0.41607	0.52496	0.24569	0.20322
TEST24	0.40142	0.14411	0.54923	0.25573

Variance Explained by Each Factor

Factor1	Factor2	Factor3	Factor4
4.1589804	3.3115738	3.2194276	2.7359422

Final Communality Estimates: Total = 13.425924

TEST1	TEST2	TEST3	TEST4	TEST5	TEST6	TEST7	TEST8
0.60389472	0.36668324	0.47217872	0.45097622	0.70142247	0.72788633	0.77022686	0.57491108
TEST9	TEST10	TEST11	TEST12	TEST13	TEST14	TEST15	TEST16
0.77608730	0.75810464	0.56555180	0.66579666	0.59495177	0.52070335	0.47573202	0.55350817
TEST17	TEST18	TEST19	TEST20	TEST21	TEST22	TEST23	TEST24
0.53647167	0.50720884	0.29731639	0.47056001	0.49089020	0.44554692	0.55035982	0.54895480

```

172      TITLE2 "MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS";
173      TITLE3 "4 factors retained";
174      PROC FACTOR DATA=PSYCH24 METHOD=ML NFACT=4 SCREE
175          PREROTATE=VARIMAX ROTATE=PROMAX;
176      RUN;

NOTE: The means of one or more variables in the input data set WORK.PSYCH24 are missing and
are assumed to be 0.
NOTE: The standard deviations of one or more variables in the input data set WORK.PSYCH24 are
missing and are assumed to be 1.
NOTE: 4 factors will be retained by the NFACTOR criterion.
NOTE: Convergence criterion satisfied.
NOTE: The PROCEDURE FACTOR printed pages 9-21.
NOTE: PROCEDURE FACTOR used (Total process time):
      real time          0.25 seconds
      cpu time           0.20 seconds

```

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 4 factors retained

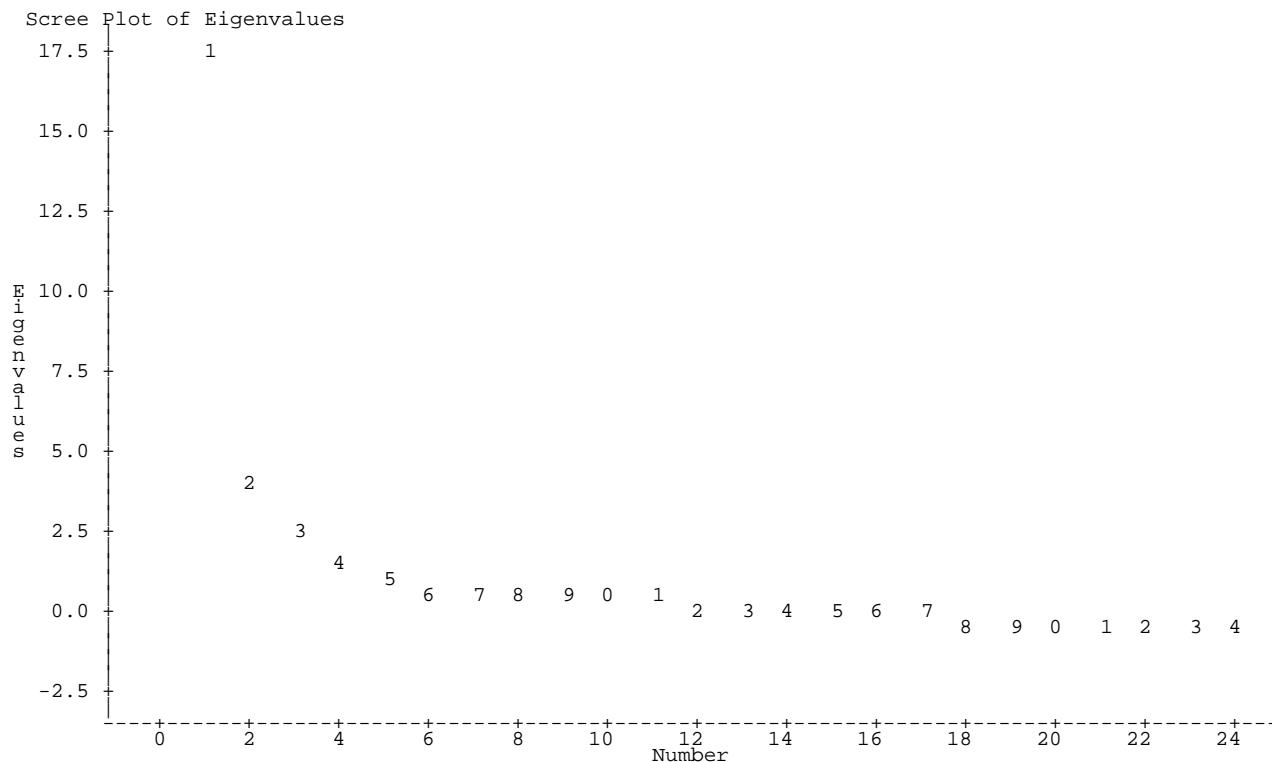
The FACTOR Procedure
 Initial Factor Method: Maximum Likelihood

Prior Communality Estimates: SMC							
TEST1	TEST2	TEST3	TEST4	TEST5	TEST6	TEST7	TEST8
0.51074801	0.29956677	0.44046280	0.40917746	0.67262103	0.67655191	0.68404928	0.56378987
TEST9	TEST10	TEST11	TEST12	TEST13	TEST14	TEST15	TEST16
0.71326475	0.57895560	0.54103427	0.53678454	0.53931177	0.35844458	0.29294344	0.42856182
TEST17	TEST18	TEST19	TEST20	TEST21	TEST22	TEST23	TEST24
0.41240693	0.44253186	0.36711889	0.46365275	0.47333988	0.44944014	0.56113998	0.52651922

Preliminary Eigenvalues: Total = 26.694987 Average = 1.11229113

	Eigenvalue	Difference	Proportion	Cumulative
1	17.5822947	13.4225953	0.6586	0.6586
2	4.1596994	1.6337271	0.1558	0.8145
3	2.5259723	0.8928210	0.0946	0.9091
4	1.6331513	0.7250124	0.0612	0.9703
5	0.9081389	0.1808811	0.0340	1.0043
6	0.7272578	0.0998699	0.0272	1.0315
7	0.6273879	0.0603841	0.0235	1.0550
8	0.5670038	0.0458145	0.0212	1.0763
9	0.5211893	0.1781537	0.0195	1.0958
10	0.3430355	0.0881568	0.0129	1.1086
11	0.2548787	0.1683309	0.0095	1.1182
12	0.0865479	0.0248586	0.0032	1.1214
13	0.0616893	0.0896592	0.0023	1.1237
14	-0.0279699	0.0602143	-0.0010	1.1227
15	-0.0881842	0.0656069	-0.0033	1.1194
16	-0.1537911	0.0767712	-0.0058	1.1136
17	-0.2305623	0.0401830	-0.0086	1.1050
18	-0.2707454	0.0137357	-0.0101	1.0948
19	-0.2844810	0.0464405	-0.0107	1.0842
20	-0.3309215	0.0651885	-0.0124	1.0718
21	-0.3961101	0.0406891	-0.0148	1.0570
22	-0.4367992	0.0894649	-0.0164	1.0406
23	-0.5262641	0.0311669	-0.0197	1.0209
24	-0.5574310		-0.0209	1.0000

4 factors will be retained by the NFACTOR criterion.



TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 4 factors retained

The FACTOR Procedure
 Initial Factor Method: Maximum Likelihood

Iteration	Criterion	Ridge	Change	Communalities							
1	1.7139244	0.0000	0.1487	0.54136	0.22448	0.34571	0.35295	0.64652	0.68170		
				0.72022	0.51741	0.74956	0.72770	0.47003	0.56915		
				0.51536	0.34232	0.30014	0.44772	0.41067	0.40967		
				0.24319	0.41477	0.41792	0.40238	0.51065	0.48513		
2	1.7109778	0.0000	0.0232	0.55857	0.22150	0.35512	0.34979	0.64933	0.68889		
				0.71629	0.51536	0.74326	0.75089	0.45317	0.56766		
				0.51043	0.35073	0.30370	0.45128	0.40387	0.40835		
				0.23912	0.40967	0.41732	0.40001	0.50395	0.49759		
3	1.7108303	0.0000	0.0073	0.56089	0.22020	0.35579	0.34911	0.64806	0.68836		
				0.71740	0.51466	0.74364	0.75815	0.45001	0.56585		
				0.50983	0.35347	0.30374	0.45127	0.40234	0.40761		
				0.23865	0.40864	0.41691	0.39904	0.50304	0.49948		
4	1.7108220	0.0000	0.0016	0.56147	0.21996	0.35633	0.34886	0.64805	0.68850		
				0.71736	0.51465	0.74341	0.75971	0.44927	0.56519		
				0.50944	0.35390	0.30394	0.45103	0.40191	0.40739		
				0.23852	0.40844	0.41703	0.39899	0.50278	0.50007		
5	1.7108215	0.0000	0.0004	0.56153	0.21991	0.35643	0.34881	0.64800	0.68849		
				0.71740	0.51464	0.74341	0.76015	0.44909	0.56500		
				0.50933	0.35401	0.30398	0.45095	0.40185	0.40735		
				0.23850	0.40839	0.41707	0.39897	0.50274	0.50019		

Convergence criterion satisfied.

Significance Tests Based on 146 Observations

Test	DF	Chi-Square	Pr > ChiSq
H0: No common factors	276	1557.2986	<.0001
HA: At least one common factor			
H0: 4 Factors are sufficient	186	228.3947	0.0186
HA: More factors are needed			

Chi-Square without Bartlett's Correction	248.06912
Akaike's Information Criterion	-123.93088
Schwarz's Bayesian Criterion	-678.88171
Tucker and Lewis's Reliability Coefficient	0.95090

Squared Canonical Correlations

Factor1	Factor2	Factor3	Factor4
0.94652976	0.82938866	0.74537322	0.61388846

Eigenvalues of the Weighted Reduced Correlation Matrix: Total=27.08051 Average=1.12835458

	Eigenvalue	Difference	Proportion	Cumulative
1	17.7019933	12.8407182	0.6537	0.6537
2	4.8612752	1.9339584	0.1795	0.8332
3	2.9273167	1.3373916	0.1081	0.9413
4	1.5899252	0.8105064	0.0587	1.0000
5	0.7794187	0.1726094	0.0288	1.0288
6	0.6068093	0.0483825	0.0224	1.0512
7	0.5584269	0.0771289	0.0206	1.0718
8	0.4812979	0.0285471	0.0178	1.0896
9	0.4527508	0.2078850	0.0167	1.1063
10	0.2448658	0.0550129	0.0090	1.1153
11	0.1898529	0.0791819	0.0070	1.1224
12	0.1106710	0.0912827	0.0041	1.1264
13	0.0193883	0.0709376	0.0007	1.1272
14	-0.0515494	0.0320972	-0.0019	1.1253
15	-0.0836466	0.0549626	-0.0031	1.1222
16	-0.1386092	0.0872752	-0.0051	1.1170
17	-0.2258844	0.0522247	-0.0083	1.1087
18	-0.2781091	0.0400535	-0.0103	1.0984
19	-0.3181626	0.0371017	-0.0117	1.0867
20	-0.3552643	0.0564058	-0.0131	1.0736
21	-0.4116701	0.0425196	-0.0152	1.0584
22	-0.4541897	0.0865167	-0.0168	1.0416
23	-0.5407064	0.0449837	-0.0200	1.0216
24	-0.5856901		-0.0216	1.0000

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 4 factors retained

The FACTOR Procedure
 Initial Factor Method: Maximum Likelihood

Factor Pattern

	Factor1	Factor2	Factor3	Factor4
TEST1	0.55342	0.04390	0.45372	-0.21788
TEST2	0.34387	-0.01027	0.28899	-0.13433
TEST3	0.37692	-0.11110	0.42087	-0.15785
TEST4	0.46482	-0.07084	0.29765	-0.19780
TEST5	0.74084	-0.22510	-0.21698	-0.03755
TEST6	0.73699	-0.34736	-0.14510	0.06013
TEST7	0.73793	-0.32458	-0.24150	-0.09586
TEST8	0.69609	-0.12060	-0.03345	-0.12012
TEST9	0.74920	-0.39105	-0.15977	0.06046
TEST10	0.48607	0.61685	-0.37844	-0.01357
TEST11	0.54006	0.37002	-0.03950	0.13752
TEST12	0.44733	0.57162	-0.04044	-0.19102
TEST13	0.57850	0.30690	0.11722	-0.25829
TEST14	0.40388	0.04476	0.08226	0.42677
TEST15	0.36481	0.07087	0.16164	0.37383
TEST16	0.45232	0.07260	0.41925	0.25555
TEST17	0.43844	0.19015	0.08045	0.40864
TEST18	0.46444	0.31466	0.24447	0.18130
TEST19	0.41547	0.09305	0.17419	0.16395
TEST20	0.60196	-0.09058	0.19094	0.03702
TEST21	0.56078	0.27063	0.14596	-0.08982
TEST22	0.59494	-0.08052	0.19260	0.03791
TEST23	0.66947	-0.00046	0.21544	-0.09021
TEST24	0.65434	0.23727	-0.11262	0.05551

Variance Explained by Each Factor

Factor	Weighted	Unweighted
Factor1	17.7019933	7.51620990
Factor2	4.8612752	1.70225755
Factor3	2.9273167	1.32755256
Factor4	1.5899252	0.92017414

Final Communality Estimates and Variable Weights
 Total Communality: Weighted = 27.080510 Unweighted = 11.466194

Variable	Communality	Weight
TEST1	0.56153584	2.28065503
TEST2	0.21990783	1.28190598
TEST3	0.35646577	1.55383576
TEST4	0.34879683	1.53565179

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 4 factors retained

The FACTOR Procedure

Initial Factor Method: Maximum Likelihood

Final Communality Estimates and Variable Weights

Total Communality: Weighted = 27.080510 Unweighted = 11.466194

Variable	Communality	Weight
TEST5	0.64799828	2.84091198
TEST6	0.68849187	3.21016724
TEST7	0.71739816	3.53855078
TEST8	0.51463793	2.06031049
TEST9	0.74340964	3.89730792
TEST10	0.76016825	4.16930909
TEST11	0.44905672	1.81516883
TEST12	0.56498405	2.29886098
TEST13	0.50930297	2.03802501
TEST14	0.35402072	1.54802235
TEST15	0.30398834	1.43673526
TEST16	0.45093447	1.82133631
TEST17	0.40184450	1.67182006
TEST18	0.40735069	1.68734828
TEST19	0.23849459	1.31319323
TEST20	0.40838509	1.69030969
TEST21	0.41708643	1.71547364
TEST22	0.39897213	1.66381592
TEST23	0.50273878	2.01103754
TEST24	0.50022425	2.00075684

Prerotation Method: Varimax

Orthogonal Transformation Matrix

	1	2	3	4
1	0.69169	0.43646	0.43149	0.38064
2	-0.55603	-0.06570	0.81189	0.16539
3	-0.45860	0.78173	-0.30945	0.28779
4	-0.04558	-0.44056	-0.24269	0.86310

Rotated Factor Pattern

	Factor1	Factor2	Factor3	Factor4
TEST1	0.16024	0.68934	0.18691	0.16044
TEST2	0.11715	0.43585	0.08321	0.09642
TEST3	0.13667	0.57036	-0.01949	0.10999
TEST4	0.23341	0.52735	0.09895	0.08015
TEST5	0.73881	0.18506	0.21316	0.14991
TEST6	0.76672	0.20456	0.06630	0.23322
TEST7	0.80601	0.19684	0.15289	0.07496
TEST8	0.56935	0.33851	0.24195	0.13171
TEST9	0.80617	0.20116	0.04055	0.22670
TEST10	0.16739	-0.11824	0.83095	0.16641
TEST11	0.17966	0.11994	0.51230	0.37409
TEST12	0.01883	0.21023	0.71599	0.08831
TEST13	0.18751	0.43775	0.52520	0.08176
TEST14	0.19729	0.04962	0.08158	0.55315
TEST15	0.12177	0.11623	0.07421	0.51975
TEST16	0.06858	0.40780	0.06236	0.52539
TEST17	0.14201	0.06173	0.21950	0.57419
TEST18	0.02591	0.29327	0.33622	0.45566
TEST19	0.14828	0.23916	0.16113	0.36517
TEST20	0.37748	0.40163	0.11813	0.30105
TEST21	0.17457	0.38064	0.43833	0.22270
TEST22	0.36624	0.39881	0.12254	0.30129
TEST23	0.36863	0.50038	0.24372	0.23890
TEST24	0.36979	0.15751	0.49636	0.30380

Variance Explained by Each Factor

Factor	Weighted	Unweighted
Factor1	10.5911882	3.64681706
Factor2	5.4905661	2.87236175
Factor3	6.8741697	2.65692640
Factor4	4.1245864	2.29008894

Final Communality Estimates and Variable Weights

Total Communality: Weighted = 27.080510 Unweighted = 11.466194

Variable Communality Weight

TEST1	0.56153584	2.28065503
TEST2	0.21990783	1.28190598
TEST3	0.35646577	1.55383576
TEST4	0.34879683	1.53565179
TEST5	0.64799828	2.84091198
TEST6	0.68849187	3.21016724
TEST7	0.71739816	3.53855078
TEST8	0.51463793	2.06031049
TEST9	0.74340964	3.89730792
TEST10	0.76016825	4.16930909
TEST11	0.44905672	1.81516883
TEST12	0.56498405	2.29886098
TEST13	0.50930297	2.03802501
TEST14	0.35402072	1.54802235
TEST15	0.30398834	1.43673526
TEST16	0.45093447	1.82133631
TEST17	0.40184450	1.67182006
TEST18	0.40735069	1.68734828
TEST19	0.23849459	1.31319323
TEST20	0.40838509	1.69030969
TEST21	0.41708643	1.71547364
TEST22	0.39897213	1.66381592
TEST23	0.50273878	2.01103754
TEST24	0.50022425	2.00075684

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 4 factors retained

The FACTOR Procedure
 Rotation Method: Promax (power = 3)

Target Matrix for Procrustean Transformation

	Factor1	Factor2	Factor3	Factor4
TEST1	0.01135	0.89291	0.01793	0.01171
TEST2	0.01809	0.92091	0.00645	0.01038
TEST3	0.01392	1.00000	-0.00004	0.00746
TEST4	0.07163	0.81663	0.00543	0.00298
TEST5	0.89712	0.01394	0.02145	0.00771
TEST6	0.91553	0.01719	0.00059	0.02650
TEST7	1.00000	0.01440	0.00679	0.00083
TEST8	0.58010	0.12052	0.04431	0.00739
TEST9	0.94852	0.01457	0.00012	0.02170
TEST10	0.00821	-0.00286	1.00000	0.00830
TEST11	0.02236	0.00658	0.51613	0.20767
TEST12	0.00002	0.02510	0.99839	0.00194
TEST13	0.02105	0.26473	0.46041	0.00179
TEST14	0.04230	0.00067	0.00298	0.95915
TEST15	0.01250	0.01075	0.00282	1.00000
TEST16	0.00124	0.25690	0.00093	0.57171
TEST17	0.01305	0.00106	0.04795	0.88708
TEST18	0.00008	0.11128	0.16888	0.43438
TEST19	0.03248	0.13472	0.04149	0.49905
TEST20	0.23917	0.28475	0.00730	0.12479
TEST21	0.02292	0.23485	0.36116	0.04894
TEST22	0.22620	0.28872	0.00843	0.12955
TEST23	0.16307	0.40315	0.04691	0.04566
TEST24	0.16586	0.01267	0.39929	0.09461

Procrustean Transformation Matrix

	1	2	3	4
1	1.25401034	-0.260681	-0.1282145	-0.2312799
2	-0.2209997	1.36855068	-0.1442649	-0.2603313
3	-0.1532395	-0.1245504	1.18483147	-0.2621459
4	-0.1895123	-0.2295569	-0.1755721	1.57869293

Normalized Oblique Transformation Matrix

	1	2	3	4
1	0.5939563	0.23889855	0.28048972	0.16115846
2	-0.7871922	-0.0727868	0.97117388	0.14593531
3	-0.7087753	1.00611657	-0.45139	0.32954951
4	-0.0809002	-0.6572086	-0.3541767	1.16724159

Rotation Method: Promax (power = 3)

Inter-Factor Correlations

	Factor1	Factor2	Factor3	Factor4
Factor1	1.00000	0.48809	0.39270	0.45676
Factor2	0.48809	1.00000	0.38892	0.47622
Factor3	0.39270	0.38892	1.00000	0.44135
Factor4	0.45676	0.47622	0.44135	1.00000

Rotated Factor Pattern (Standardized Regression Coefficients)

	Factor1	Factor2	Factor3	Factor4
TEST1	-0.00981	0.72871	0.07022	-0.00921
TEST2	0.01837	0.46193	0.00361	-0.00764
TEST3	0.02580	0.62532	-0.13625	-0.00101
TEST4	0.13688	0.54567	-0.00272	-0.06822
TEST5	0.77405	-0.00025	0.10043	-0.02880
TEST6	0.80917	0.01584	-0.08643	0.09045
TEST7	0.87273	0.01993	0.03473	-0.11992
TEST8	0.54181	0.22037	0.13577	-0.05666
TEST9	0.86118	0.00697	-0.11893	0.08159
TEST10	0.07245	-0.30061	0.91104	0.02780
TEST11	0.04637	-0.02803	0.47996	0.28854
TEST12	-0.14017	0.15011	0.76653	-0.08078
TEST13	0.03983	0.40355	0.49889	-0.12484
TEST14	0.11182	-0.10448	-0.03153	0.59688
TEST15	0.01609	-0.00106	-0.03421	0.55875
TEST16	-0.10632	0.35664	-0.08238	0.51994
TEST17	0.02065	-0.09672	0.12660	0.60190
TEST18	-0.15978	0.21486	0.26130	0.41296
TEST19	0.03680	0.15999	0.07021	0.32931
TEST20	0.29052	0.31818	-0.01843	0.18992
TEST21	0.02386	0.32015	0.38605	0.07313
TEST22	0.27718	0.31685	-0.01169	0.19185
TEST23	0.25260	0.43601	0.12203	0.07353
TEST24	0.27721	-0.01074	0.44515	0.16775

Reference Axis Correlations

	Factor1	Factor2	Factor3	Factor4
Factor1	1.00000	-0.30842	-0.17623	-0.23148
Factor2	-0.30842	1.00000	-0.15775	-0.26955
Factor3	-0.17623	-0.15775	1.00000	-0.26199
Factor4	-0.23148	-0.26955	-0.26199	1.00000

Rotation Method: Promax (power = 3)

Reference Structure (Semipartial Correlations)

	Factor1	Factor2	Factor3	Factor4
TEST1	-0.00806	0.59369	0.06042	-0.00747
TEST2	0.01509	0.37634	0.00311	-0.00620
TEST3	0.02120	0.50946	-0.11722	-0.00082
TEST4	0.11246	0.44457	-0.00234	-0.05537
TEST5	0.63597	-0.00021	0.08640	-0.02337
TEST6	0.66482	0.01291	-0.07436	0.07340
TEST7	0.71705	0.01624	0.02988	-0.09732
TEST8	0.44516	0.17954	0.11680	-0.04598
TEST9	0.70756	0.00568	-0.10232	0.06621
TEST10	0.05953	-0.24491	0.78379	0.02256
TEST11	0.03810	-0.02284	0.41293	0.23416
TEST12	-0.11517	0.12230	0.65946	-0.06555
TEST13	0.03272	0.32878	0.42921	-0.10132
TEST14	0.09187	-0.08512	-0.02713	0.48440
TEST15	0.01322	-0.00087	-0.02943	0.45346
TEST16	-0.08735	0.29056	-0.07087	0.42196
TEST17	0.01696	-0.07880	0.10892	0.48848
TEST18	-0.13128	0.17505	0.22480	0.33514
TEST19	0.03023	0.13035	0.06040	0.26725
TEST20	0.23869	0.25922	-0.01586	0.15413
TEST21	0.01960	0.26083	0.33213	0.05935
TEST22	0.22774	0.25814	-0.01006	0.15570
TEST23	0.20754	0.35522	0.10499	0.05967
TEST24	0.22776	-0.00875	0.38297	0.13614

Variance Explained by Each Factor Eliminating Other Factors

Factor	Weighted	Unweighted
Factor1	7.24896979	2.33097952
Factor2	3.11039789	1.64118303
Factor3	5.01362010	1.80037850
Factor4	2.00708114	1.20924567

Factor Structure (Correlations)

	Factor1	Factor2	Factor3	Factor4
TEST1	0.36924	0.74685	0.34572	0.36434
TEST2	0.24176	0.46866	0.18710	0.22233
TEST3	0.27704	0.58444	0.11663	0.24843
TEST4	0.37099	0.57893	0.23315	0.25296
TEST5	0.80021	0.40290	0.39159	0.36896
TEST6	0.82427	0.42025	0.27741	0.42944
TEST7	0.84132	0.40230	0.33227	0.30352
TEST8	0.67681	0.51064	0.40923	0.35568
TEST9	0.85514	0.41990	0.25797	0.42576
TEST10	0.29619	0.10231	0.83484	0.31982
TEST11	0.35296	0.31867	0.61461	0.50820
TEST12	0.19722	0.34135	0.73421	0.26500
TEST13	0.37569	0.55756	0.61637	0.30571
TEST14	0.32106	0.22208	0.23518	0.58427
TEST15	0.25735	0.25958	0.21830	0.55050
TEST16	0.27289	0.52031	0.24405	0.60486
TEST17	0.29808	0.24924	0.36274	0.62115
TEST18	0.23632	0.43515	0.46438	0.55762
TEST19	0.29287	0.36208	0.29222	0.45329
TEST20	0.52533	0.54325	0.30322	0.46601
TEST21	0.36512	0.51676	0.55221	0.40687
TEST22	0.51487	0.53896	0.30506	0.46419
TEST23	0.54692	0.64178	0.42325	0.45040
TEST24	0.52339	0.37757	0.62387	0.48572

Variance Explained by Each Factor Ignoring Other Factors

Factor	Weighted	Unweighted
Factor1	15.0156172	5.74010082
Factor2	10.3692560	5.10851051
Factor3	10.6357711	4.44434686
Factor4	9.0385422	4.50204003

Final Communality Estimates and Variable Weights

Total Communality: Weighted = 27.080510 Unweighted = 11.466194

Variable	Communality	Weight
TEST1	0.56153584	2.28065503
TEST2	0.21990783	1.28190598
TEST3	0.35646577	1.55383576
TEST4	0.34879683	1.53565179

TWENTY FOUR PSYCHOLOGICAL TESTS
MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
4 factors retained

The FACTOR Procedure

Rotation Method: Promax (power = 3)

Final Communality Estimates and Variable Weights

Total Communality: Weighted = 27.080510 Unweighted = 11.466194

Variable	Communality	Weight
TEST5	0.64799828	2.84091198
TEST6	0.68849187	3.21016724
TEST7	0.71739816	3.53855078
TEST8	0.51463793	2.06031049
TEST9	0.74340964	3.89730792
TEST10	0.76016825	4.16930909
TEST11	0.44905672	1.81516883
TEST12	0.56498405	2.29886098
TEST13	0.50930297	2.03802501
TEST14	0.35402072	1.54802235
TEST15	0.30398834	1.43673526
TEST16	0.45093447	1.82133631
TEST17	0.40184450	1.67182006
TEST18	0.40735069	1.68734828
TEST19	0.23849459	1.31319323
TEST20	0.40838509	1.69030969
TEST21	0.41708643	1.71547364
TEST22	0.39897213	1.66381592
TEST23	0.50273878	2.01103754
TEST24	0.50022425	2.00075684

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Initial Factor Method: Maximum Likelihood

Prior Communality Estimates: SMC

TEST1	TEST2	TEST3	TEST4	TEST5	TEST6	TEST7
TEST8						
0.51074801	0.29956677	0.44046280	0.40917746	0.67262103	0.67655191	0.68404928
0.56378987						
TEST9	TEST10	TEST11	TEST12	TEST13	TEST14	TEST15
TEST16						
0.71326475	0.57895560	0.54103427	0.53678454	0.53931177	0.35844458	0.29294344
0.42856182						
TEST17	TEST18	TEST19	TEST20	TEST21	TEST22	TEST23
TEST24						
0.41240693	0.44253186	0.36711889	0.46365275	0.47333988	0.44944014	0.56113998
0.52651922						

Preliminary Eigenvalues: Total = 26.694987 Average = 1.11229113

	Eigenvalue	Difference	Proportion	Cumulative
1	17.5822947	13.4225953	0.6586	0.6586
2	4.1596994	1.6337271	0.1558	0.8145
3	2.5259723	0.8928210	0.0946	0.9091
4	1.6331513	0.7250124	0.0612	0.9703
5	0.9081389	0.1808811	0.0340	1.0043
6	0.7272578	0.0998699	0.0272	1.0315
7	0.6273879	0.0603841	0.0235	1.0550
8	0.5670038	0.0458145	0.0212	1.0763
9	0.5211893	0.1781537	0.0195	1.0958
10	0.3430355	0.0881568	0.0129	1.1086
11	0.2548787	0.1683309	0.0095	1.1182
12	0.0865479	0.0248586	0.0032	1.1214
13	0.0616893	0.0896592	0.0023	1.1237
14	-0.0279699	0.0602143	-0.0010	1.1227
15	-0.0881842	0.0656069	-0.0033	1.1194
16	-0.1537911	0.0767712	-0.0058	1.1136
17	-0.2305623	0.0401830	-0.0086	1.1050
18	-0.2707454	0.0137357	-0.0101	1.0948
19	-0.2844810	0.0464405	-0.0107	1.0842
20	-0.3309215	0.0651885	-0.0124	1.0718
21	-0.3961101	0.0406891	-0.0148	1.0570
22	-0.4367992	0.0894649	-0.0164	1.0406
23	-0.5262641	0.0311669	-0.0197	1.0209
24	-0.5574310		-0.0209	1.0000

5 factors will be retained by the NFACTOR criterion.

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Initial Factor Method: Maximum Likelihood

Iteration	Criterion	Ridge	Change	Communalities							
1	1.4222122	0.0000	0.1853	0.54888	0.22512	0.35861	0.34919	0.64468	0.70946		
				0.71854	0.51613	0.74846	0.76423	0.57349	0.54966		
				0.71369	0.35648	0.29646	0.45381	0.40465	0.41091		
				0.24313	0.48140	0.44744	0.43001	0.55704	0.50668		
2	1.4173058	0.0000	0.0305	0.55116	0.22174	0.35836	0.34934	0.64566	0.71148		
				0.71955	0.51288	0.73910	0.78282	0.60400	0.55451		
				0.74342	0.36154	0.29726	0.45079	0.39269	0.40599		
				0.23696	0.47993	0.43944	0.42283	0.55887	0.52086		
3	1.4171128	0.0000	0.0066	0.54992	0.21984	0.36049	0.35059	0.64383	0.71112		
				0.72195	0.51402	0.73869	0.78517	0.61059	0.55551		
				0.74552	0.36199	0.29521	0.45018	0.38837	0.40481		
				0.23645	0.47914	0.43722	0.42109	0.55786	0.52220		
4	1.4170971	0.0000	0.0022	0.54982	0.21939	0.36111	0.35105	0.64362	0.71153		
				0.72250	0.51449	0.73816	0.78543	0.61274	0.55575		
				0.74506	0.36165	0.29474	0.45000	0.38700	0.40450		
				0.23634	0.47903	0.43664	0.42065	0.55758	0.52237		
5	1.4170950	0.0000	0.0008	0.54989	0.21922	0.36126	0.35118	0.64347	0.71167		
				0.72274	0.51464	0.73804	0.78534	0.61358	0.55590		
				0.74459	0.36151	0.29459	0.44997	0.38661	0.40443		
				0.23631	0.47902	0.43645	0.42050	0.55753	0.52238		

Convergence criterion satisfied.

Significance Tests Based on 146 Observations

Test	DF	Chi-Square	Pr > ChiSq
H0: No common factors	276	1557.2986	<.0001
HA: At least one common factor			
H0: 5 Factors are sufficient	166	188.2375	0.1139
HA: More factors are needed			
Chi-Square without Bartlett's Correction		205.47878	
Akaike's Information Criterion		-126.52122	
Schwarz's Bayesian Criterion		-621.79992	
Tucker and Lewis's Reliability Coefficient		0.97114	

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Initial Factor Method: Maximum Likelihood

Squared Canonical Correlations

Factor1	Factor2	Factor3	Factor4	Factor5
0.95042342	0.84554000	0.75650463	0.65684459	0.56676672

Eigenvalues of the Weighted Reduced Correlation Matrix: Total = 30.9741907 Average = 1.29059128

	Eigenvalue	Difference	Proportion	Cumulative
1	19.1708140	13.6966460	0.6189	0.6189
2	5.4741680	2.3673136	0.1767	0.7957
3	3.1068543	1.1927228	0.1003	0.8960
4	1.9141316	0.6059063	0.0618	0.9578
5	1.3082253	0.6680468	0.0422	1.0000
6	0.6401785	0.0590275	0.0207	1.0207
7	0.5811510	0.0685533	0.0188	1.0394
8	0.5125977	0.0451368	0.0165	1.0560
9	0.4674608	0.1716668	0.0151	1.0711
10	0.2957941	0.0565751	0.0095	1.0806
11	0.2392190	0.0727840	0.0077	1.0883
12	0.1664350	0.0868291	0.0054	1.0937
13	0.0796059	0.0549188	0.0026	1.0963
14	0.0246871	0.0452325	0.0008	1.0971
15	-0.0205453	0.0609973	-0.0007	1.0964
16	-0.0815427	0.0586665	-0.0026	1.0938
17	-0.1402092	0.0912987	-0.0045	1.0893
18	-0.2315079	0.0712839	-0.0075	1.0818
19	-0.3027918	0.0256956	-0.0098	1.0720
20	-0.3284874	0.0646149	-0.0106	1.0614
21	-0.3931022	0.0349561	-0.0127	1.0487
22	-0.4280583	0.0842516	-0.0138	1.0349
23	-0.5123099	0.0562670	-0.0165	1.0184
24	-0.5685769		-0.0184	1.0000

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Initial Factor Method: Maximum Likelihood

	Factor Pattern				
	Factor1	Factor2	Factor3	Factor4	Factor5
TEST1	0.56039	0.01982	0.46204	-0.14677	0.02105
TEST2	0.34423	-0.03418	0.28845	-0.04396	0.11988
TEST3	0.37631	-0.13136	0.43279	-0.11973	0.02756
TEST4	0.46154	-0.09932	0.29807	-0.11714	0.16058
TEST5	0.72649	-0.25282	-0.21911	-0.05932	-0.01461
TEST6	0.72261	-0.37892	-0.16159	0.00032	-0.14091
TEST7	0.72182	-0.35390	-0.23989	-0.13660	0.01735
TEST8	0.68924	-0.15295	-0.02956	-0.10476	0.06626
TEST9	0.72605	-0.42423	-0.17160	0.02454	-0.02922
TEST10	0.51237	0.59459	-0.38907	0.03878	0.12803
TEST11	0.57354	0.37977	-0.03560	0.07303	-0.36593
TEST12	0.47560	0.54623	-0.01623	-0.11821	0.13085
TEST13	0.62652	0.34569	0.19136	-0.38582	-0.21698
TEST14	0.40305	0.01230	0.05112	0.36869	-0.24565
TEST15	0.35922	0.02594	0.12252	0.37272	-0.10438
TEST16	0.45354	0.03151	0.38625	0.28807	-0.10535
TEST17	0.43713	0.13899	0.03925	0.40184	-0.11446
TEST18	0.47082	0.26478	0.21781	0.25349	0.03055
TEST19	0.41710	0.06246	0.15457	0.17694	-0.05687
TEST20	0.59235	-0.15226	0.17135	0.15371	0.22798
TEST21	0.57352	0.23385	0.14415	0.02077	0.17768
TEST22	0.58702	-0.12620	0.17547	0.12237	0.11905
TEST23	0.66759	-0.05387	0.21290	0.02554	0.25095
TEST24	0.65834	0.18611	-0.13394	0.13248	0.13720

Variance Explained by Each Factor

Factor	Weighted	Unweighted
Factor1	19.1708140	7.55790432
Factor2	5.4741680	1.70691631
Factor3	3.1068543	1.30823265
Factor4	1.9141316	0.92707258
Factor5	1.3082253	0.56059357

Final Communality Estimates and Variable Weights
 Total Communality: Weighted = 30.974193 Unweighted = 12.060719

Variable	Communality	Weight
TEST1	0.54989905	2.22166470
TEST2	0.21916626	1.28076464
TEST3	0.36127355	1.56558043

TWENTY FOUR PSYCHOLOGICAL TESTS
MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
5 factors retained

The FACTOR Procedure

Initial Factor Method: Maximum Likelihood

Final Communality Estimates and Variable Weights

Total Communality: Weighted = 30.974193 Unweighted = 12.060719

Variable	Communality	Weight
TEST4	0.35123090	1.54126894
TEST5	0.64344091	2.80482060
TEST6	0.71171283	3.46824615
TEST7	0.72277714	3.60670199
TEST8	0.51468466	2.06032804
TEST9	0.73801757	3.81739020
TEST10	0.78533318	4.65848193
TEST11	0.61367976	2.58786640
TEST12	0.55592481	2.25175133
TEST13	0.74458530	3.91534225
TEST14	0.36148746	1.56619969
TEST15	0.29454016	1.41760694
TEST16	0.44996996	1.81806964
TEST17	0.38651921	1.63028348
TEST18	0.40441324	1.67906107
TEST19	0.23630478	1.30943814
TEST20	0.47902425	1.91947100
TEST21	0.43638714	1.77447306
TEST22	0.42045431	1.72563519
TEST23	0.55752588	2.26002508
TEST24	0.52236713	2.09371987

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Prerotation Method: Varimax

Orthogonal Transformation Matrix

	1	2	3	4	5
1	0.66214	0.44985	0.43641	0.38428	0.14518
2	-0.56762	-0.09412	0.77659	0.12073	0.22645
3	-0.47068	0.78844	-0.31700	0.19943	0.12869
4	-0.12864	-0.24529	-0.10633	0.81660	-0.49512
5	-0.03589	0.32707	0.30766	-0.36213	-0.81605

Rotated Factor Pattern

	Factor1	Factor2	Factor3	Factor4	Factor5
TEST1	0.16045	0.65741	0.13557	0.18241	0.20080
TEST2	0.11292	0.43548	0.07380	0.10637	0.00330
TEST3	0.13444	0.56126	-0.05377	0.10731	0.11737
TEST4	0.23099	0.53323	0.09166	0.07100	0.00983
TEST5	0.73582	0.18763	0.19198	0.16180	0.06132
TEST6	0.77462	0.18717	0.02893	0.25100	0.11314
TEST7	0.80869	0.20806	0.13608	0.06898	0.04726
TEST8	0.56820	0.34851	0.22291	0.13096	0.05943
TEST9	0.80021	0.21567	0.03020	0.22418	-0.00105
TEST10	0.17530	-0.09987	0.84396	0.17639	0.03528
TEST11	0.18469	0.05660	0.43616	0.45130	0.42715
TEST12	0.02301	0.22153	0.68973	0.10156	0.14240
TEST13	0.18597	0.42385	0.45548	0.08417	0.56196
TEST14	0.19722	0.04968	0.05447	0.55659	0.08580
TEST15	0.12127	0.13019	0.06633	0.50777	-0.02556
TEST16	0.06734	0.40048	0.03692	0.52851	0.06603
TEST17	0.14449	0.07850	0.20832	0.56218	-0.00556
TEST18	0.02522	0.30642	0.32450	0.45227	0.00591
TEST19	0.14725	0.24163	0.14522	0.36373	0.05339
TEST20	0.37004	0.45276	0.13974	0.28638	-0.18858
TEST21	0.17011	0.40266	0.43866	0.22998	-0.00051
TEST22	0.35772	0.42322	0.12617	0.30215	-0.07851
TEST23	0.36011	0.54905	0.25651	0.22248	-0.10531
TEST24	0.37135	0.18541	0.50243	0.30725	-0.05707

Variance Explained by Each Factor

Factor	Weighted	Unweighted
Factor1	10.8904074	3.63126151
Factor2	6.1144882	2.96490284
Factor3	7.4103154	2.45225351
Factor4	4.4823004	2.34463014

TWENTY FOUR PSYCHOLOGICAL TESTS
MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
5 factors retained

The FACTOR Procedure
Prerotation Method: Varimax

Variance Explained by Each Factor

Factor	Weighted	Unweighted
Factor5	2.0766818	0.66767144

Final Communality Estimates and Variable Weights
Total Communality: Weighted = 30.974193 Unweighted = 12.060719

Variable	Communality	Weight
TEST1	0.54989905	2.22166470
TEST2	0.21916626	1.28076464
TEST3	0.36127355	1.56558043
TEST4	0.35123090	1.54126894
TEST5	0.64344091	2.80482060
TEST6	0.71171283	3.46824615
TEST7	0.72277714	3.60670199
TEST8	0.51468466	2.06032804
TEST9	0.73801757	3.81739020
TEST10	0.78533318	4.65848193
TEST11	0.61367976	2.58786640
TEST12	0.55592481	2.25175133
TEST13	0.74458530	3.91534225
TEST14	0.36148746	1.56619969
TEST15	0.29454016	1.41760694
TEST16	0.44996996	1.81806964
TEST17	0.38651921	1.63028348
TEST18	0.40441324	1.67906107
TEST19	0.23630478	1.30943814
TEST20	0.47902425	1.91947100
TEST21	0.43638714	1.77447306
TEST22	0.42045431	1.72563519
TEST23	0.55752588	2.26002508
TEST24	0.52236713	2.09371987

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Rotation Method: Promax (power = 3)

Target Matrix for Procrustean Transformation

	Factor1	Factor2	Factor3	Factor4	Factor5
TEST1	0.01177	0.85572	0.00707	0.01817	0.07188
TEST2	0.01630	0.98856	0.00453	0.01432	0.00000
TEST3	0.01300	1.00000	-0.00083	0.00695	0.02696
TEST4	0.06879	0.89456	0.00428	0.00210	0.00002
TEST5	0.89685	0.01572	0.01587	0.01002	0.00162
TEST6	0.89945	0.01341	0.00005	0.03216	0.00873
TEST7	1.00000	0.01800	0.00475	0.00065	0.00062
TEST8	0.57724	0.14080	0.03473	0.00743	0.00206
TEST9	0.93901	0.01943	0.00005	0.02170	-0.00000
TEST10	0.00899	-0.00176	1.00000	0.00963	0.00023
TEST11	0.01523	0.00046	0.19982	0.23345	0.58692
TEST12	0.00003	0.03221	0.91648	0.00309	0.02522
TEST13	0.01163	0.14555	0.17028	0.00113	1.00000
TEST14	0.04101	0.00069	0.00086	0.96869	0.01052
TEST15	0.01296	0.01695	0.00211	1.00000	-0.00038
TEST16	0.00118	0.26135	0.00019	0.59718	0.00345
TEST17	0.01458	0.00247	0.04356	0.90280	-0.00000
TEST18	0.00007	0.13740	0.15382	0.43921	0.00000
TEST19	0.03230	0.15082	0.03087	0.51149	0.00480
TEST20	0.17757	0.34381	0.00953	0.08650	-0.07323
TEST21	0.01984	0.27813	0.33899	0.05152	-0.00000
TEST22	0.19508	0.34148	0.00853	0.12354	-0.00643
TEST23	0.13034	0.48831	0.04694	0.03230	-0.01016
TEST24	0.15759	0.02074	0.38893	0.09380	-0.00178

Procrustean Transformation Matrix

	1	2	3	4	5
1	1.24976105	-0.2707568	-0.0952676	-0.2328909	-0.0395509
2	-0.2432352	1.38841695	-0.122643	-0.2567918	0.01648697
3	-0.1789083	-0.1323732	1.09819595	-0.3080664	0.0466272
4	-0.1858808	-0.2019349	-0.15591	1.57627087	-0.0381119
5	0.08061667	-0.1003246	-0.2194156	0.03863822	1.26508126

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Rotation Method: Promax (power = 3)

Normalized Oblique Transformation Matrix

	1	2	3	4	5
1	0.54761185	0.25268757	0.28172647	0.15522039	0.13739997
2	-0.7829031	-0.108552	0.88935092	0.08704248	0.27301541
3	-0.7077639	1.03591539	-0.4806032	0.24286043	0.13855454
4	-0.2583683	-0.3480857	-0.0974256	1.04426903	-0.5326859
5	-0.1679048	0.4945567	0.56156916	-0.5789897	-0.8033084

Inter-Factor Correlations

	Factor1	Factor2	Factor3	Factor4	Factor5
Factor1	1.00000	0.50221	0.40801	0.45237	0.07357
Factor2	0.50221	1.00000	0.39627	0.46288	0.11901
Factor3	0.40801	0.39627	1.00000	0.46462	0.19244
Factor4	0.45237	0.46288	0.46462	1.00000	0.10662
Factor5	0.07357	0.11901	0.19244	0.10662	1.00000

Rotated Factor Pattern (Standardized Regression Coefficients)

	Factor1	Factor2	Factor3	Factor4	Factor5
TEST1	-0.00127	0.67959	-0.02043	0.03546	0.20770
TEST2	0.00235	0.46409	-0.00045	0.00519	0.00505
TEST3	0.02891	0.61300	-0.19167	0.01109	0.11744
TEST4	0.12284	0.55637	0.00004	-0.07992	0.01100
TEST5	0.76862	-0.00253	0.08271	-0.01594	0.04378
TEST6	0.83031	-0.01346	-0.13492	0.12186	0.08647
TEST7	0.87452	0.02843	0.02695	-0.12972	0.02815
TEST8	0.53404	0.22938	0.11977	-0.06127	0.05143
TEST9	0.84974	0.02876	-0.10907	0.07664	-0.02944
TEST10	0.05892	-0.28830	0.92826	0.00316	0.05532
TEST11	0.08453	-0.13957	0.30383	0.40157	0.43261
TEST12	-0.14714	0.14992	0.71258	-0.08177	0.17008
TEST13	0.07313	0.34601	0.30772	-0.10345	0.58680
TEST14	0.12089	-0.09636	-0.07394	0.60328	0.06676
TEST15	0.01092	0.03351	-0.02954	0.53743	-0.04127
TEST16	-0.10642	0.35893	-0.11706	0.52877	0.05561
TEST17	0.01818	-0.06046	0.12447	0.57539	-0.01866
TEST18	-0.17426	0.24274	0.25590	0.39605	0.00759
TEST19	0.03395	0.16903	0.04959	0.32541	0.04721
TEST20	0.24432	0.40295	0.06216	0.14883	-0.20146
TEST21	-0.00624	0.34950	0.39803	0.06320	0.00882
TEST22	0.24447	0.36008	0.02375	0.18160	-0.09031
TEST23	0.20834	0.51030	0.17629	0.03202	-0.10868

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Rotation Method: Promax (power = 3)

Rotated Factor Pattern (Standardized Regression Coefficients)

	Factor1	Factor2	Factor3	Factor4	Factor5
TEST24	0.25234	0.02914	0.47951	0.14477	-0.05808

Reference Axis Correlations

	Factor1	Factor2	Factor3	Factor4	Factor5
Factor1	1.00000	-0.33271	-0.18473	-0.21661	0.02867
Factor2	-0.33271	1.00000	-0.14396	-0.24315	-0.05036
Factor3	-0.18473	-0.14396	1.00000	-0.28728	-0.15120
Factor4	-0.21661	-0.24315	-0.28728	1.00000	-0.00988
Factor5	0.02867	-0.05036	-0.15120	-0.00988	1.00000

Reference Structure (Semipartial Correlations)

	Factor1	Factor2	Factor3	Factor4	Factor5
TEST1	-0.00104	0.55222	-0.01711	0.02880	0.20351
TEST2	0.00191	0.37711	-0.00038	0.00422	0.00495
TEST3	0.02354	0.49811	-0.16050	0.00901	0.11507
TEST4	0.10001	0.45209	0.00003	-0.06490	0.01078
TEST5	0.62576	-0.00206	0.06925	-0.01294	0.04289
TEST6	0.67599	-0.01094	-0.11298	0.09896	0.08472
TEST7	0.71198	0.02310	0.02257	-0.10534	0.02758
TEST8	0.43479	0.18639	0.10029	-0.04975	0.05039
TEST9	0.69181	0.02337	-0.09133	0.06224	-0.02885
TEST10	0.04797	-0.23426	0.77730	0.00257	0.05420
TEST11	0.06882	-0.11341	0.25442	0.32611	0.42387
TEST12	-0.11980	0.12183	0.59670	-0.06641	0.16665
TEST13	0.05954	0.28116	0.25767	-0.08401	0.57494
TEST14	0.09842	-0.07830	-0.06192	0.48991	0.06541
TEST15	0.00889	0.02723	-0.02473	0.43643	-0.04044
TEST16	-0.08664	0.29166	-0.09802	0.42940	0.05449
TEST17	0.01480	-0.04913	0.10423	0.46726	-0.01828
TEST18	-0.14187	0.19724	0.21429	0.32162	0.00743
TEST19	0.02764	0.13735	0.04153	0.26426	0.04625
TEST20	0.19891	0.32743	0.05205	0.12086	-0.19738
TEST21	-0.00508	0.28400	0.33330	0.05132	0.00864
TEST22	0.19903	0.29260	0.01988	0.14748	-0.08848
TEST23	0.16961	0.41465	0.14762	0.02600	-0.10648
TEST24	0.20544	0.02368	0.40152	0.11756	-0.05690

TWENTY FOUR PSYCHOLOGICAL TESTS
 MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
 5 factors retained

The FACTOR Procedure
 Rotation Method: Promax (power = 3)

Variance Explained by Each Factor Eliminating Other Factors

Factor	Weighted	Unweighted
Factor1	7.17523205	2.24715397
Factor2	3.41663252	1.69532852
Factor3	4.90812284	1.52364785
Factor4	2.11854937	1.21032633
Factor5	2.12825243	0.68172778

Factor Structure (Correlations)

	Factor1	Factor2	Factor3	Factor4	Factor5
TEST1	0.36301	0.71199	0.30479	0.36211	0.28834
TEST2	0.23795	0.46809	0.18780	0.22140	0.06092
TEST3	0.27222	0.57067	0.09079	0.23138	0.15682
TEST4	0.36693	0.58239	0.23562	0.23438	0.07774
TEST5	0.79710	0.41408	0.39632	0.37368	0.11424
TEST6	0.82999	0.41676	0.27178	0.43776	0.13298
TEST7	0.84318	0.42161	0.34018	0.29457	0.08722
TEST8	0.67418	0.52280	0.40999	0.34762	0.13453
TEST9	0.85219	0.44425	0.27897	0.42053	0.02368
TEST10	0.29838	0.11718	0.85017	0.33356	0.20431
TEST11	0.35188	0.26064	0.55283	0.56249	0.52350
TEST12	0.19441	0.34079	0.70669	0.27028	0.30551
TEST13	0.36882	0.52662	0.53952	0.29532	0.68155
TEST14	0.32015	0.22225	0.23035	0.58613	0.11427
TEST15	0.25578	0.27114	0.22996	0.53975	0.01513
TEST16	0.26936	0.51048	0.23813	0.59831	0.12435
TEST17	0.29751	0.26211	0.37167	0.61147	0.06078
TEST18	0.23178	0.44086	0.46647	0.54929	0.11513
TEST19	0.28974	0.36197	0.29070	0.44708	0.11406
TEST20	0.52455	0.59520	0.35191	0.45327	-0.10769
TEST21	0.36092	0.53440	0.56504	0.40803	0.13329
TEST22	0.51050	0.56558	0.33318	0.46027	-0.00554
TEST23	0.54303	0.68667	0.45747	0.43279	0.00472
TEST24	0.52383	0.40598	0.65010	0.48900	0.07166

Variance Explained by Each Factor Ignoring Other Factors

Factor	Weighted	Unweighted
Factor1	15.6654460	5.70169763
Factor2	11.4822633	5.23323357
Factor3	11.8458542	4.39232665
Factor4	9.6180736	4.47083671

TWENTY FOUR PSYCHOLOGICAL TESTS
MAXIMUM LIKELIHOOD EXPLORATORY FACTOR ANALYSIS
5 factors retained

The FACTOR Procedure
Rotation Method: Promax (power = 3)

Variance Explained by Each Factor Ignoring Other Factors

Factor	Weighted	Unweighted
Factor5	3.4934650	1.14138784

Final Communality Estimates and Variable Weights
Total Communality: Weighted = 30.974193 Unweighted = 12.060719

Variable	Communality	Weight
TEST1	0.54989905	2.22166470
TEST2	0.21916626	1.28076464
TEST3	0.36127355	1.56558043
TEST4	0.35123090	1.54126894
TEST5	0.64344091	2.80482060
TEST6	0.71171283	3.46824615
TEST7	0.72277714	3.60670199
TEST8	0.51468466	2.06032804
TEST9	0.73801757	3.81739020
TEST10	0.78533318	4.65848193
TEST11	0.61367976	2.58786640
TEST12	0.55592481	2.25175133
TEST13	0.74458530	3.91534225
TEST14	0.36148746	1.56619969
TEST15	0.29454016	1.41760694
TEST16	0.44996996	1.81806964
TEST17	0.38651921	1.63028348
TEST18	0.40441324	1.67906107
TEST19	0.23630478	1.30943814
TEST20	0.47902425	1.91947100
TEST21	0.43638714	1.77447306
TEST22	0.42045431	1.72563519
TEST23	0.55752588	2.26002508
TEST24	0.52236713	2.09371987