The FACTOR Procedure

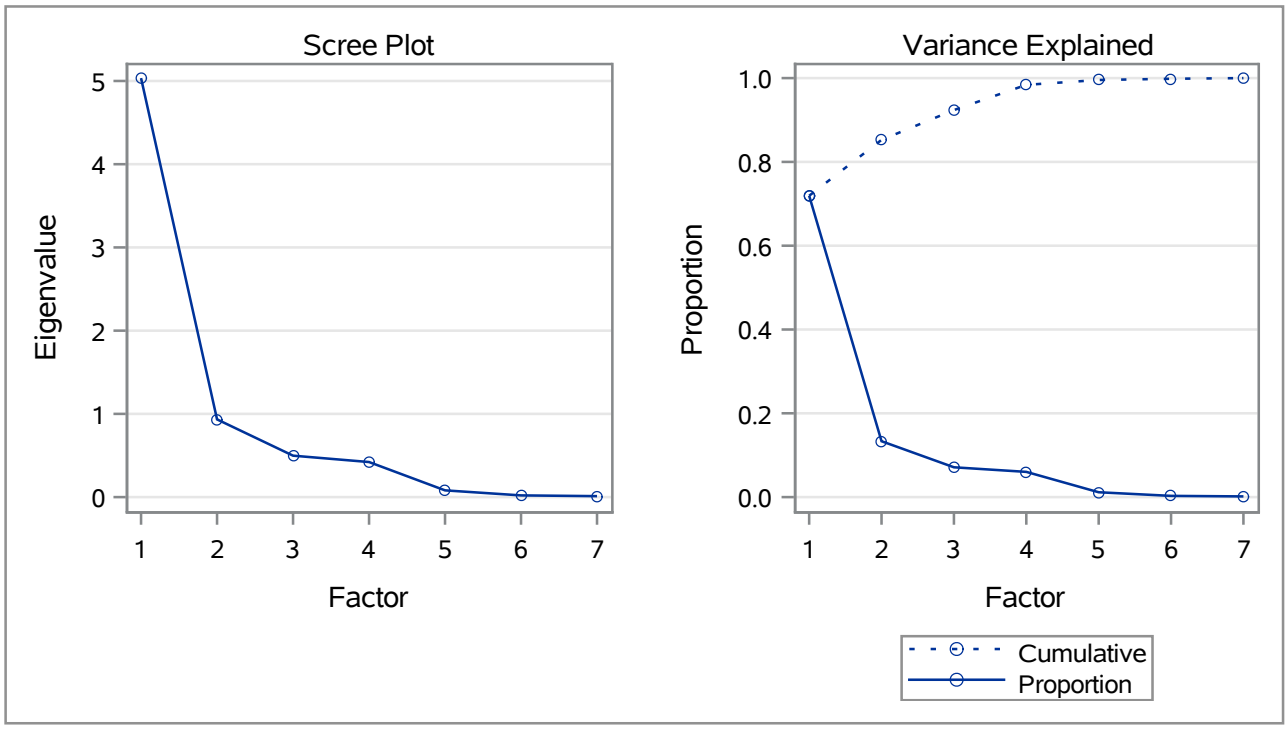
Input Data Type	Raw Data
Number of Records Read	50
Number of Records Used	50
N for Significance Tests	50

The FACTOR Procedure
Initial Factor Method: Principal Components

Prior Communality Estimates: ONE

Eigenvalues of the Correlation Matrix: Total = 7 Average = 1				
	Eigenvalue	Difference	Proportion	Cumulative
1	5.03459779	4.10108165	0.7192	0.7192
2	0.93351614	0.43559640	0.1334	0.8526
3	0.49791975	0.07667426	0.0711	0.9237
4	0.42124549	0.34020506	0.0602	0.9839
5	0.08104043	0.06069980	0.0116	0.9955
6	0.02034063	0.00900087	0.0029	0.9984
7	0.01133977		0.0016	1.0000

3 factors will be retained by the NFACTOR criterion.



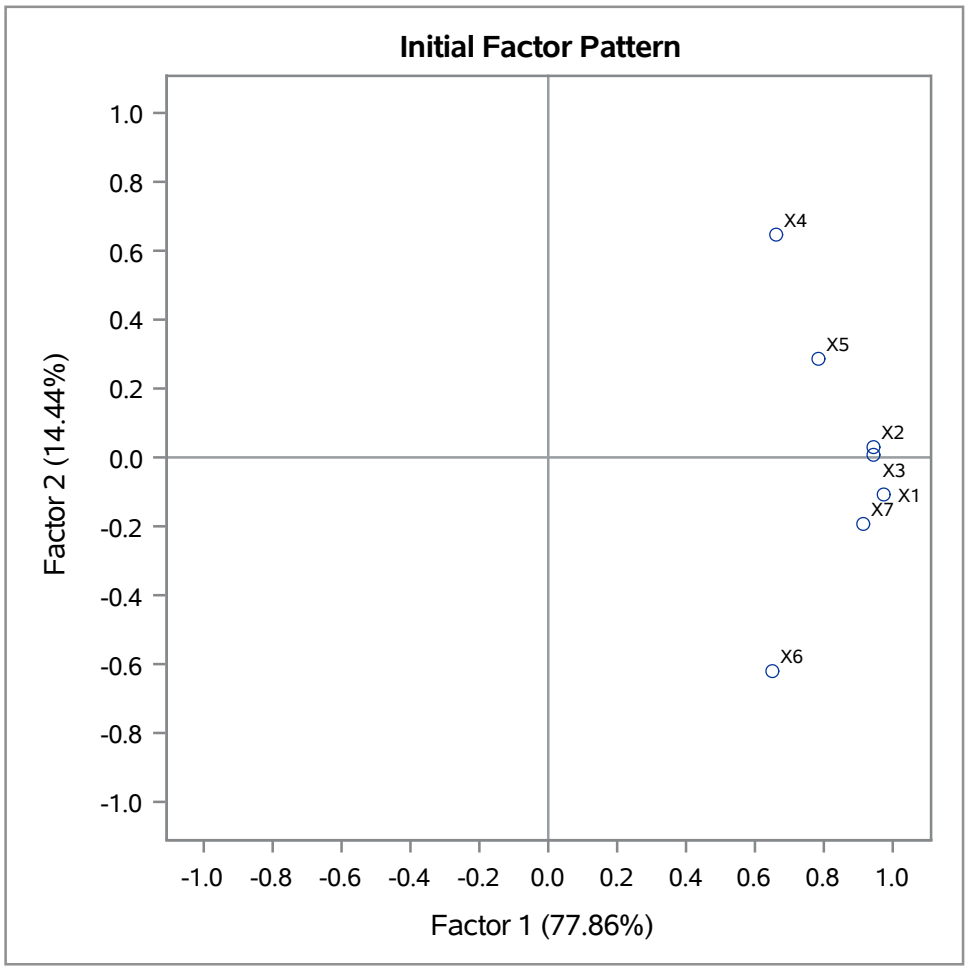
Factor Pattern				
		Factor1	Factor2	Factor3
X1	Growth of Sales	0.97307	-0.10798	-0.05327
X2	Profitability of Sales	0.94287	0.02830	-0.31223
X3	New Account Sales	0.94475	0.00889	0.14408
X4	Creativity	0.66032	0.64581	0.31859
X5	Mechanical Reasoning	0.78329	0.28497	0.00418
X6	Abstract Reasoning	0.64883	-0.62066	0.42605
X7	Mathematical Ability	0.91413	-0.19359	-0.30627

The FACTOR Procedure
Initial Factor Method: Principal Components

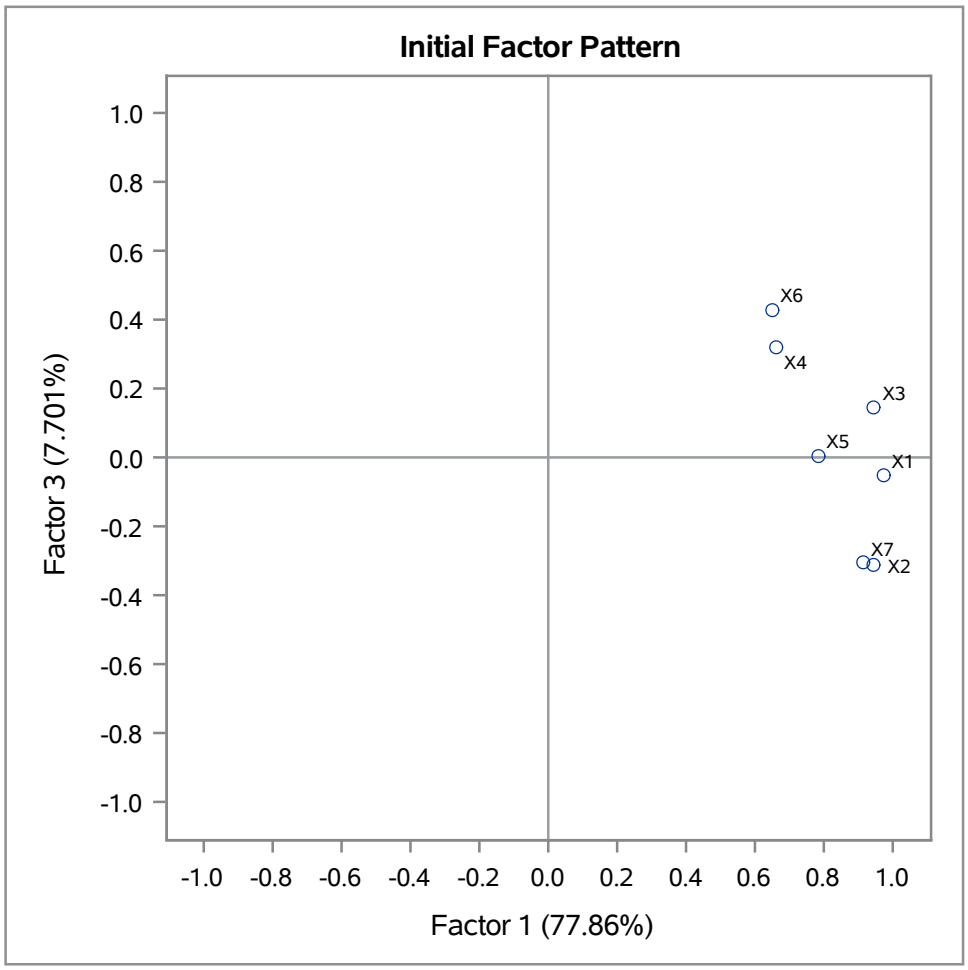
Variance Explained by Each Factor		
Factor1	Factor2	Factor3
5.0345978	0.9335161	0.4979197

Final Communality Estimates: Total = 6.466034						
X1	X2	X3	X4	X5	X6	X7
0.96135972	0.98729372	0.91339226	0.95459300	0.69476854	0.98771199	0.96691445

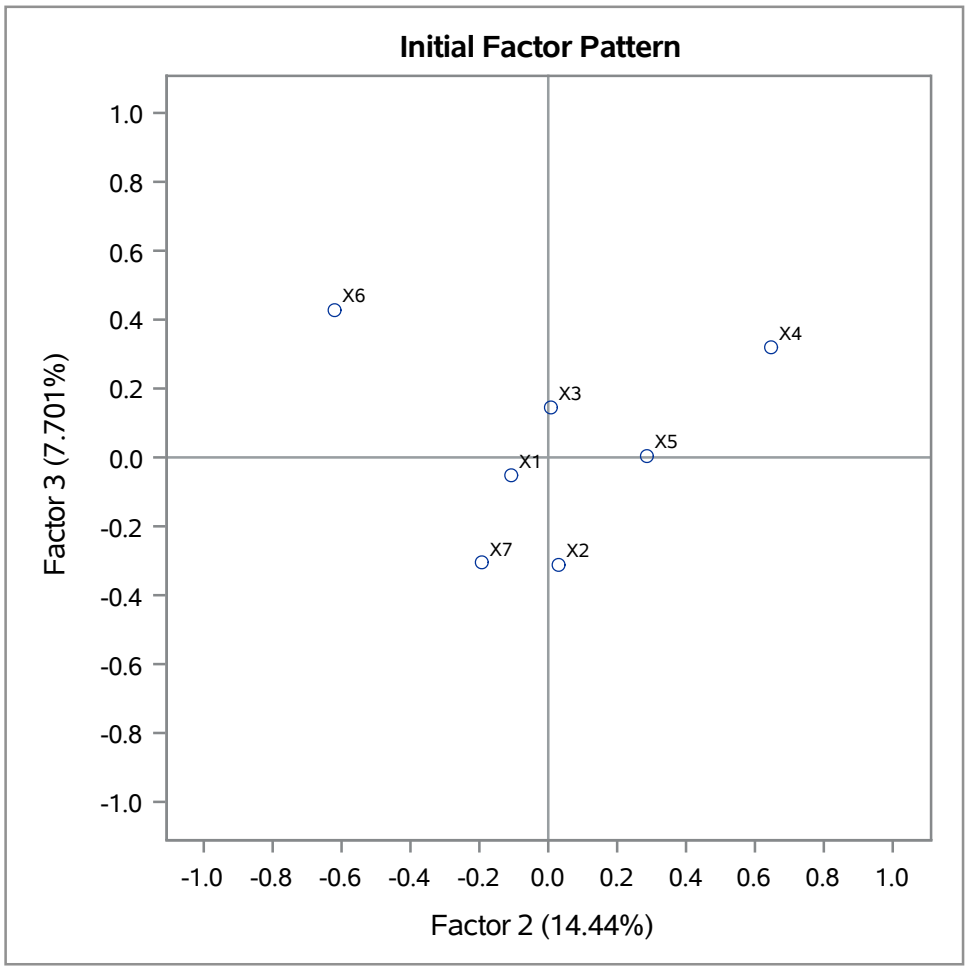
The FACTOR Procedure
Initial Factor Method: Principal Components



The FACTOR Procedure
Initial Factor Method: Principal Components



The FACTOR Procedure
Initial Factor Method: Principal Components



The FACTOR Procedure
Rotation Method: Varimax

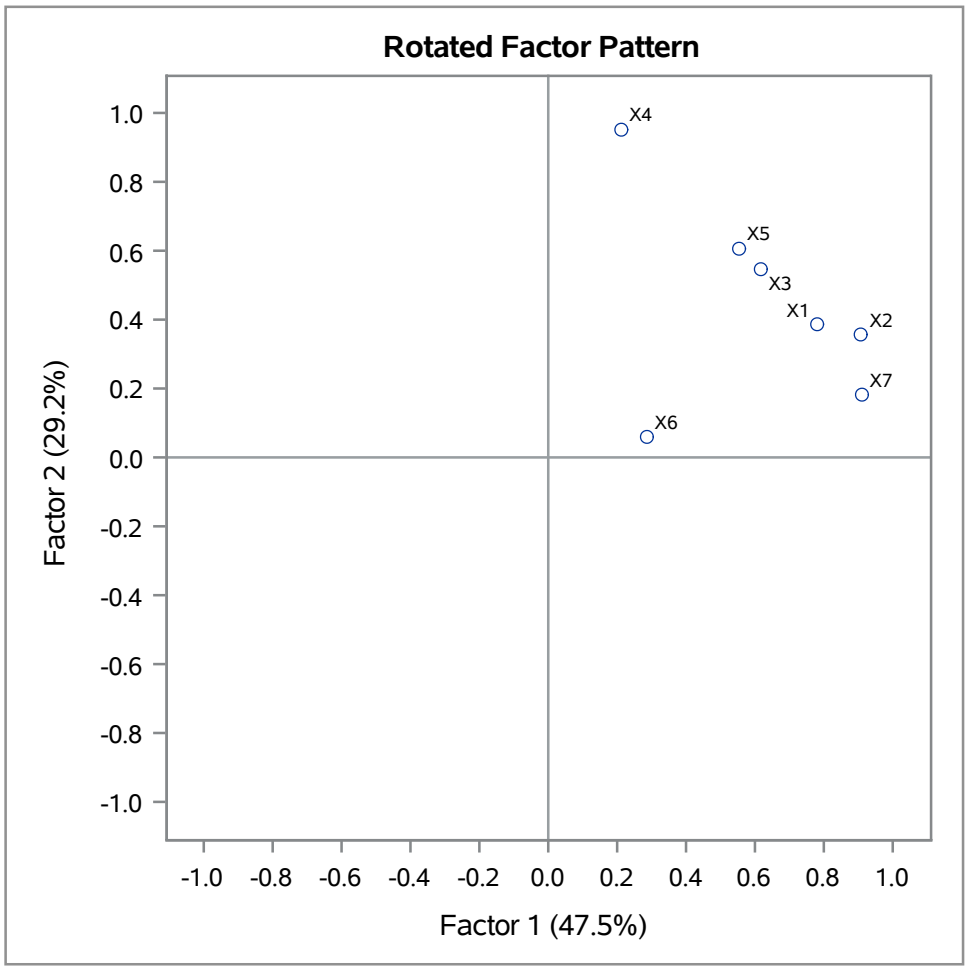
Orthogonal Transformation Matrix			
	1	2	3
1	0.75225	0.50414	0.42423
2	-0.11993	0.73787	-0.66421
3	-0.64788	0.44877	0.61552

Rotated Factor Pattern				
		Factor1	Factor2	Factor3
X1	Growth of Sales	0.77945	0.38699	0.45173
X2	Profitability of Sales	0.90816	0.35610	0.18901
X3	New Account Sales	0.61627	0.54751	0.48357
X4	Creativity	0.21286	0.95239	0.04727
X5	Mechanical Reasoning	0.55234	0.60704	0.14558
X6	Abstract Reasoning	0.28649	0.06034	0.94973
X7	Mathematical Ability	0.90929	0.18056	0.32787

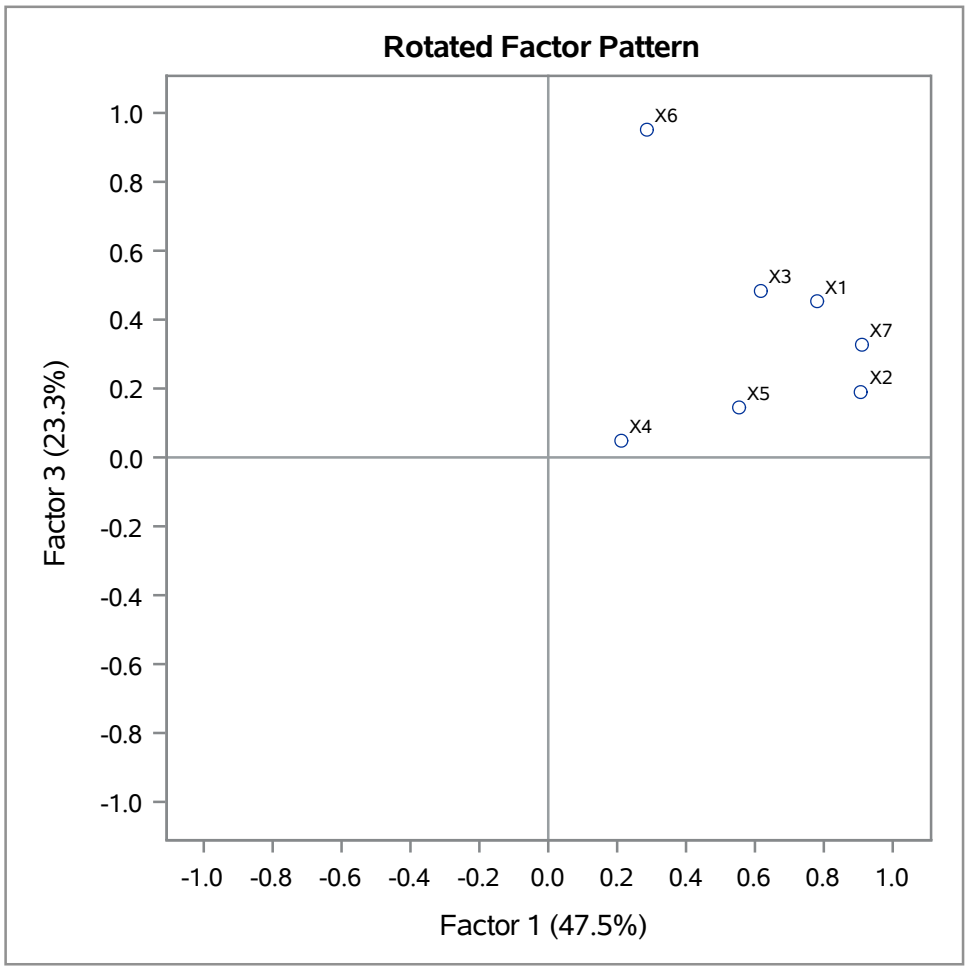
Variance Explained by Each Factor		
Factor1	Factor2	Factor3
3.0713739	1.8881164	1.5065434

Final Communality Estimates: Total = 6.466034						
X1	X2	X3	X4	X5	X6	X7
0.96135972	0.98729372	0.91339226	0.95459300	0.69476854	0.98771199	0.96691445

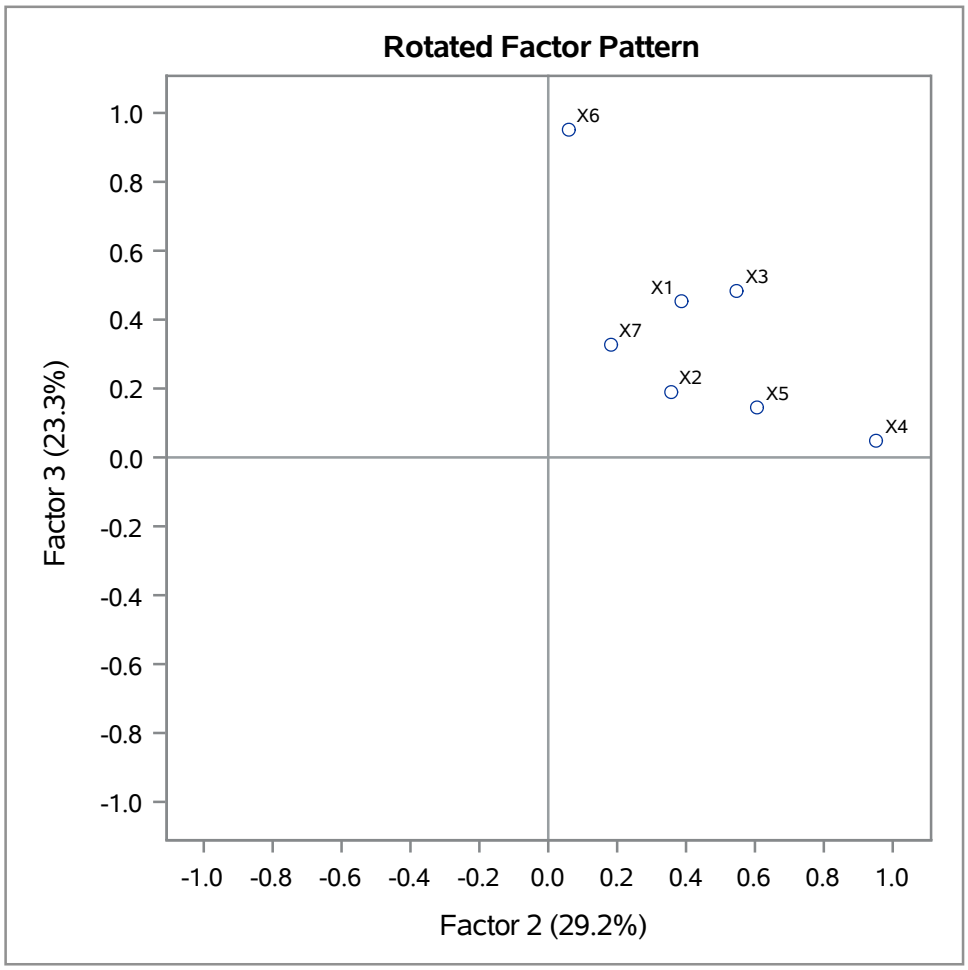
The FACTOR Procedure
Rotation Method: Varimax



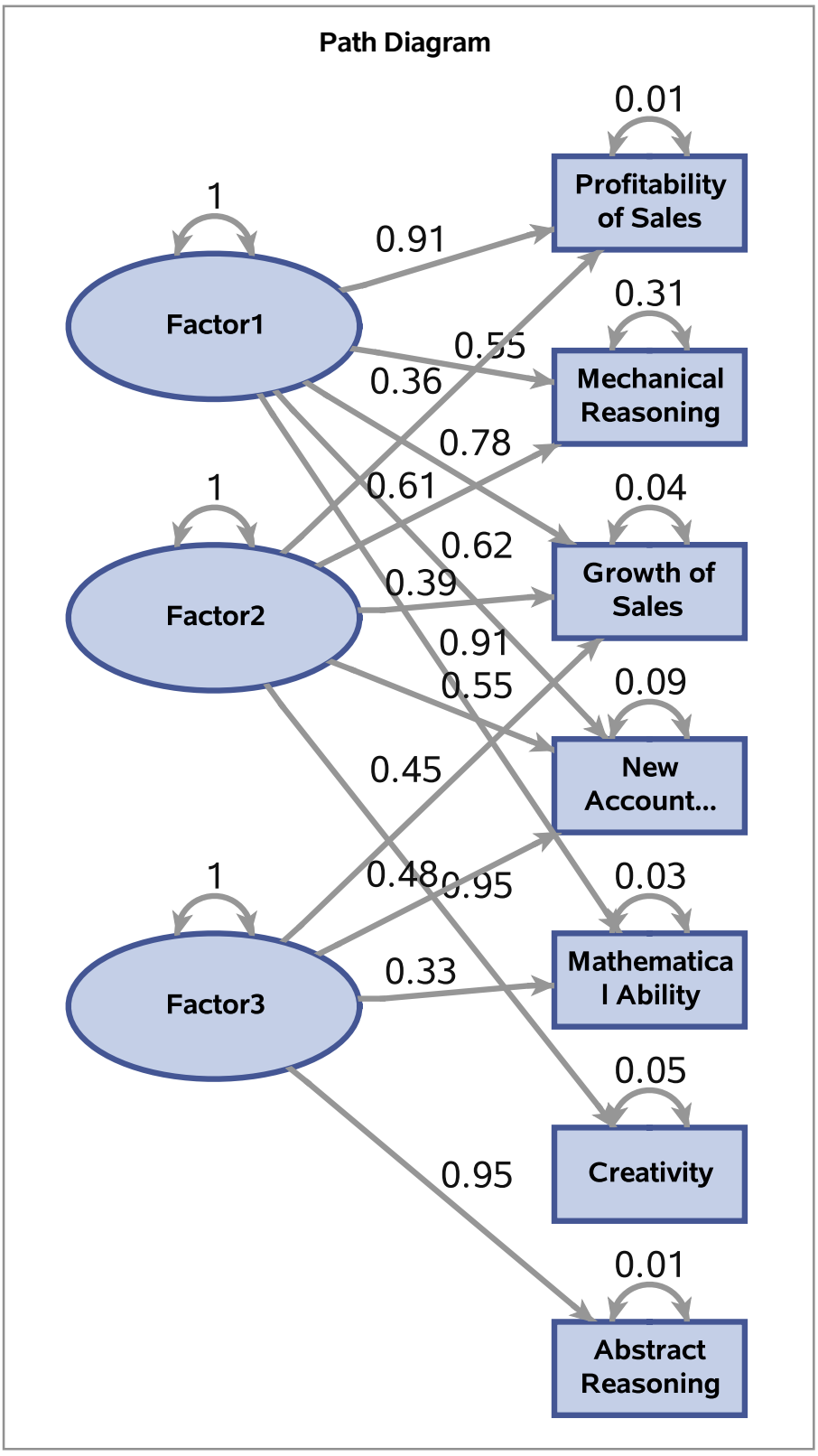
The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure

Input Data Type	Raw Data
Number of Records Read	50
Number of Records Used	50
N for Significance Tests	50

Correlations

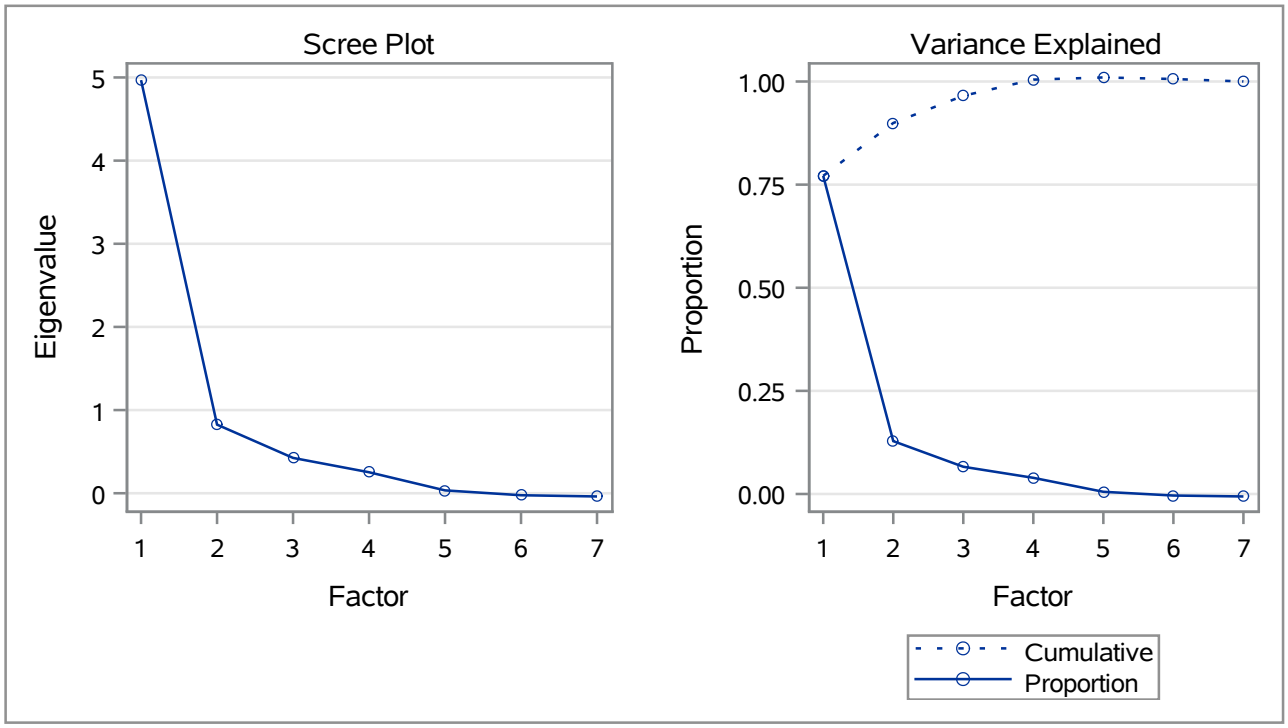
		X1	X2	X3	X4	X5	X6	X7
X1	Growth of Sales	1.00000	0.92608	0.88400	0.57204	0.70807	0.67441	0.92731
X2	Profitability of Sales	0.92608	1.00000	0.84252	0.54151	0.74591	0.46539	0.94430
X3	New Account Sales	0.88400	0.84252	1.00000	0.70036	0.63747	0.64109	0.85257
X4	Creativity	0.57204	0.54151	0.70036	1.00000	0.59074	0.14691	0.41264
X5	Mechanical Reasoning	0.70807	0.74591	0.63747	0.59074	1.00000	0.38595	0.57455
X6	Abstract Reasoning	0.67441	0.46539	0.64109	0.14691	0.38595	1.00000	0.56637
X7	Mathematical Ability	0.92731	0.94430	0.85257	0.41264	0.57455	0.56637	1.00000

The FACTOR Procedure
Initial Factor Method: Iterated Principal Factor Analysis

Prior Communality Estimates: SMC						
X1	X2	X3	X4	X5	X6	X7
0.97154338	0.96837839	0.95390306	0.90511191	0.78074838	0.88487831	0.97679536

Preliminary Eigenvalues: Total = 6.44135879 Average = 0.92019411				
	Eigenvalue	Difference	Proportion	Cumulative
1	4.96792617	4.14277662	0.7713	0.7713
2	0.82514955	0.40022321	0.1281	0.8994
3	0.42492634	0.17264667	0.0660	0.9653
4	0.25227967	0.21817160	0.0392	1.0045
5	0.03410807	0.05826526	0.0053	1.0098
6	-.02415719	0.01471663	-0.0038	1.0060
7	-.03887381		-0.0060	1.0000

3 factors will be retained by the NFACTOR criterion.



Iteration	Change	Communalities						
1	0.1602	0.96090	0.98036	0.91394	0.89492	0.62059	0.88437	0.96294
2	0.0506	0.96068	0.99329	0.90283	0.90223	0.57003	0.88810	0.95387
3	0.0147	0.96144	1.00000	0.89934	0.91336	0.55533	0.89191	0.94610
4	0.0117	0.96200	1.00000	0.89774	0.92510	0.55071	0.89531	0.93986
5	0.0115	0.96249	1.00000	0.89661	0.93658	0.54890	0.89844	0.93559

The FACTOR Procedure
Initial Factor Method: Iterated Principal Factor Analysis

Iteration	Change	Communalities						
6	0.0110	0.96283	1.00000	0.89558	0.94761	0.54785	0.90134	0.93260
7	0.0105	0.96305	1.00000	0.89458	0.95815	0.54705	0.90404	0.93043
8	0.0101	0.96318	1.00000	0.89362	0.96822	0.54634	0.90655	0.92880
9	0.0096	0.96326	1.00000	0.89269	0.97784	0.54569	0.90891	0.92752
10	0.0092	0.96332	1.00000	0.89180	0.98705	0.54508	0.91113	0.92648
11	0.0088	0.96335	1.00000	0.89096	0.99587	0.54450	0.91323	0.92559
12	0.0041	0.96337	1.00000	0.89016	1.00000	0.54397	0.91522	0.92482
13	0.0019	0.96339	1.00000	0.88959	1.00000	0.54366	0.91715	0.92427
14	0.0019	0.96340	1.00000	0.88930	1.00000	0.54359	0.91906	0.92400
15	0.0019	0.96337	1.00000	0.88910	1.00000	0.54357	0.92093	0.92387
16	0.0018	0.96333	1.00000	0.88894	1.00000	0.54356	0.92278	0.92382
17	0.0018	0.96327	1.00000	0.88879	1.00000	0.54355	0.92459	0.92383
18	0.0018	0.96321	1.00000	0.88864	1.00000	0.54354	0.92637	0.92386
19	0.0018	0.96315	1.00000	0.88850	1.00000	0.54354	0.92813	0.92391
20	0.0017	0.96308	1.00000	0.88837	1.00000	0.54353	0.92986	0.92396
21	0.0017	0.96301	1.00000	0.88824	1.00000	0.54352	0.93156	0.92402
22	0.0017	0.96295	1.00000	0.88810	1.00000	0.54351	0.93324	0.92408
23	0.0017	0.96289	1.00000	0.88798	1.00000	0.54350	0.93489	0.92415
24	0.0016	0.96282	1.00000	0.88785	1.00000	0.54350	0.93651	0.92421
25	0.0016	0.96276	1.00000	0.88773	1.00000	0.54349	0.93812	0.92427
26	0.0016	0.96270	1.00000	0.88761	1.00000	0.54348	0.93970	0.92434
27	0.0016	0.96264	1.00000	0.88749	1.00000	0.54347	0.94125	0.92440
28	0.0015	0.96258	1.00000	0.88737	1.00000	0.54347	0.94279	0.92446
29	0.0015	0.96252	1.00000	0.88726	1.00000	0.54346	0.94430	0.92452
30	0.0015	0.96246	1.00000	0.88715	1.00000	0.54345	0.94580	0.92457
31	0.0015	0.96241	1.00000	0.88703	1.00000	0.54345	0.94727	0.92463
32	0.0015	0.96235	1.00000	0.88693	1.00000	0.54344	0.94872	0.92469
33	0.0014	0.96230	1.00000	0.88682	1.00000	0.54344	0.95016	0.92474
34	0.0014	0.96224	1.00000	0.88672	1.00000	0.54343	0.95157	0.92480
35	0.0014	0.96219	1.00000	0.88661	1.00000	0.54342	0.95297	0.92485
36	0.0014	0.96214	1.00000	0.88651	1.00000	0.54342	0.95435	0.92490
37	0.0014	0.96209	1.00000	0.88641	1.00000	0.54341	0.95571	0.92495
38	0.0013	0.96204	1.00000	0.88631	1.00000	0.54341	0.95705	0.92500
39	0.0013	0.96199	1.00000	0.88622	1.00000	0.54340	0.95838	0.92505
40	0.0013	0.96194	1.00000	0.88612	1.00000	0.54340	0.95969	0.92510
41	0.0013	0.96189	1.00000	0.88603	1.00000	0.54339	0.96098	0.92515

The FACTOR Procedure
Initial Factor Method: Iterated Principal Factor Analysis

Iteration	Change	Communalities						
42	0.0013	0.96185	1.00000	0.88594	1.00000	0.54339	0.96226	0.92520
43	0.0013	0.96180	1.00000	0.88585	1.00000	0.54338	0.96352	0.92525
44	0.0012	0.96176	1.00000	0.88576	1.00000	0.54338	0.96477	0.92529
45	0.0012	0.96171	1.00000	0.88567	1.00000	0.54337	0.96600	0.92534
46	0.0012	0.96167	1.00000	0.88559	1.00000	0.54337	0.96722	0.92538
47	0.0012	0.96162	1.00000	0.88550	1.00000	0.54336	0.96842	0.92543
48	0.0012	0.96158	1.00000	0.88542	1.00000	0.54336	0.96961	0.92547
49	0.0012	0.96154	1.00000	0.88534	1.00000	0.54335	0.97079	0.92551
50	0.0012	0.96150	1.00000	0.88526	1.00000	0.54335	0.97195	0.92556
51	0.0011	0.96145	1.00000	0.88518	1.00000	0.54335	0.97310	0.92560
52	0.0011	0.96141	1.00000	0.88510	1.00000	0.54334	0.97424	0.92564
53	0.0011	0.96137	1.00000	0.88502	1.00000	0.54334	0.97536	0.92568
54	0.0011	0.96134	1.00000	0.88494	1.00000	0.54333	0.97647	0.92572
55	0.0011	0.96130	1.00000	0.88487	1.00000	0.54333	0.97757	0.92576
56	0.0011	0.96126	1.00000	0.88479	1.00000	0.54333	0.97865	0.92580
57	0.0011	0.96122	1.00000	0.88472	1.00000	0.54332	0.97973	0.92583
58	0.0011	0.96118	1.00000	0.88465	1.00000	0.54332	0.98079	0.92587
59	0.0011	0.96115	1.00000	0.88458	1.00000	0.54331	0.98184	0.92591
60	0.0010	0.96111	1.00000	0.88451	1.00000	0.54331	0.98288	0.92595
61	0.0010	0.96107	1.00000	0.88444	1.00000	0.54331	0.98391	0.92598
62	0.0010	0.96104	1.00000	0.88437	1.00000	0.54330	0.98493	0.92602
63	0.0010	0.96100	1.00000	0.88430	1.00000	0.54330	0.98594	0.92605
64	0.0010	0.96097	1.00000	0.88423	1.00000	0.54330	0.98693	0.92609

Convergence criterion satisfied.

Eigenvalues of the Reduced Correlation Matrix: Total = 6.30059331 Average = 0.90008476				
	Eigenvalue	**Difference**	**Proportion**	**Cumulative**
1	4.94159959	4.04012267	0.7843	0.7843
2	0.90147692	0.42552568	0.1431	0.9274
3	0.47595124	0.36700370	0.0755	1.0029
4	0.10894754	0.09443744	0.0173	1.0202
5	0.01451009	0.06674799	0.0023	1.0225
6	-.05223789	0.03741629	-0.0083	1.0142
7	-.08965419		-0.0142	1.0000

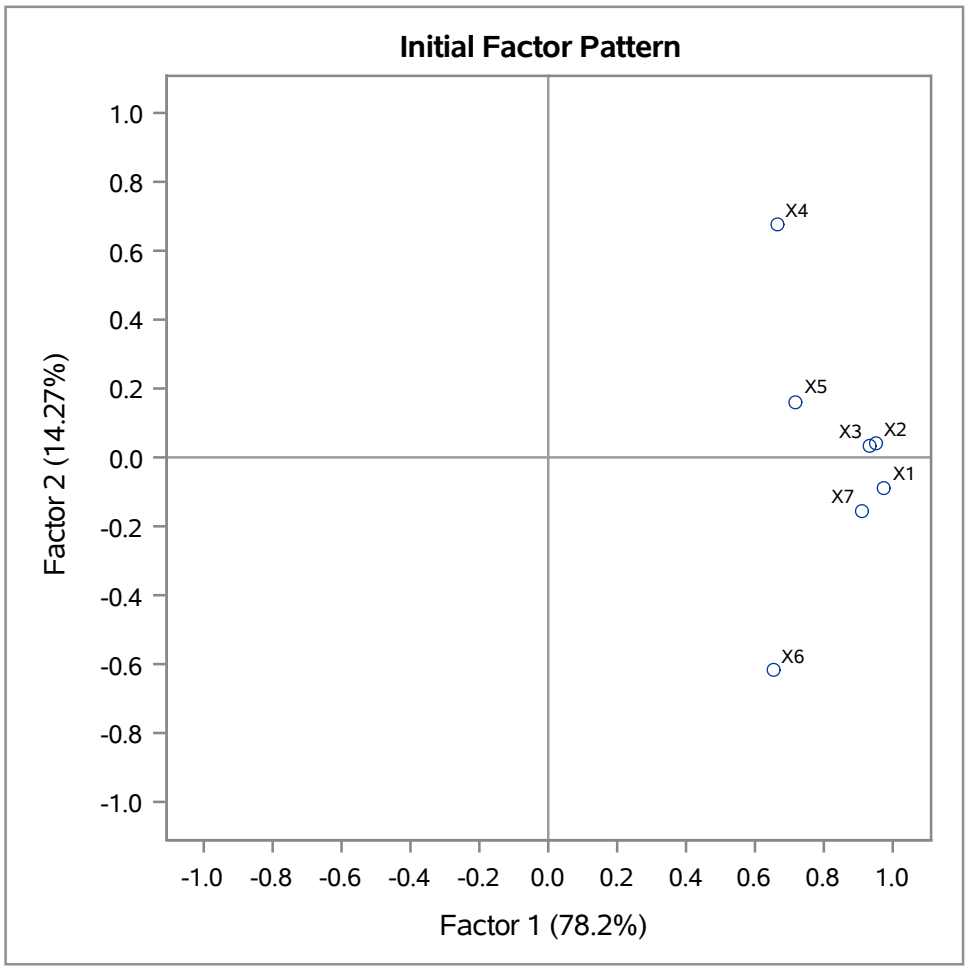
The FACTOR Procedure
Initial Factor Method: Iterated Principal Factor Analysis

Factor Pattern				
		Factor1	Factor2	Factor3
X1	Growth of Sales	0.97487	-0.09011	-0.04976
X2	Profitability of Sales	0.95123	0.03944	-0.32131
X3	New Account Sales	0.93247	0.03339	0.11667
X4	Creativity	0.66532	0.67639	0.32822
X5	Mechanical Reasoning	0.71912	0.16172	-0.00252
X6	Abstract Reasoning	0.65446	-0.61855	0.41953
X7	Mathematical Ability	0.91037	-0.15631	-0.26997

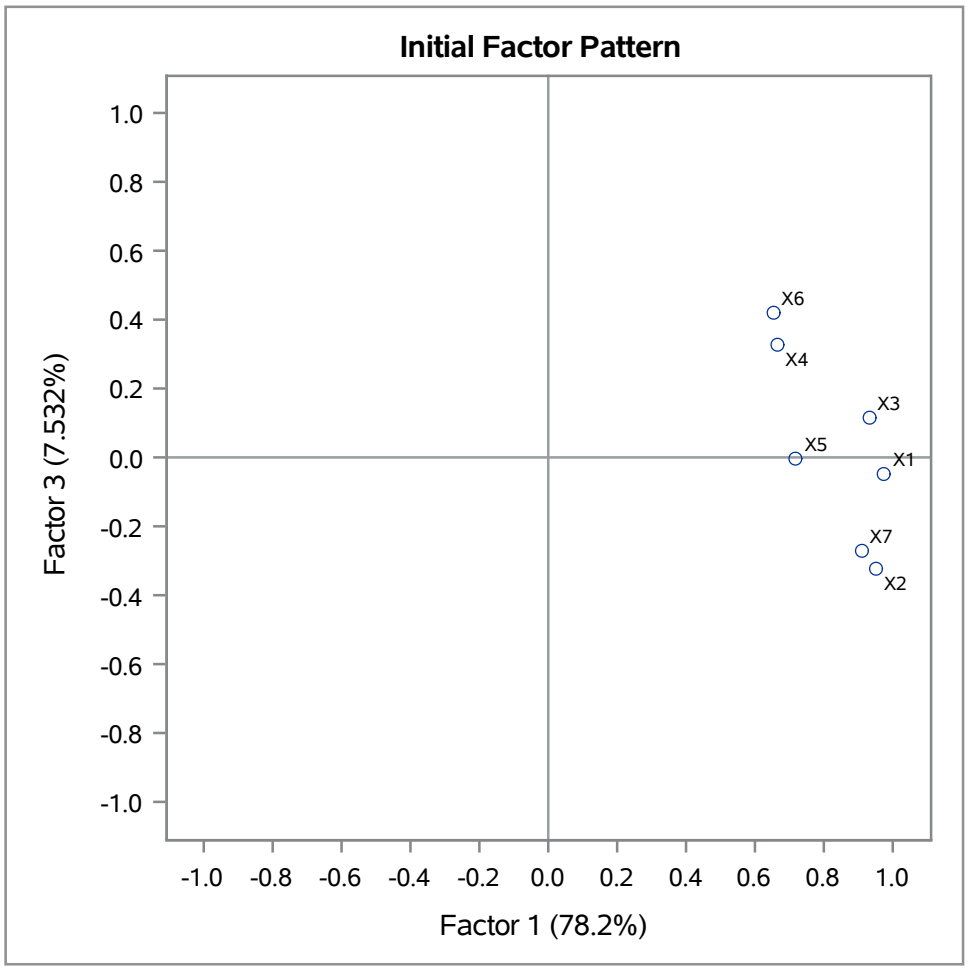
Variance Explained by Each Factor		
Factor1	Factor2	Factor3
4.9415996	0.9014769	0.4759512

Final Communality Estimates: Total = 6.319028						
X1	X2	X3	X4	X5	X6	X7
0.9609688	1.0096249	0.8842340	1.0078822	0.5432966	0.9869328	0.9260885

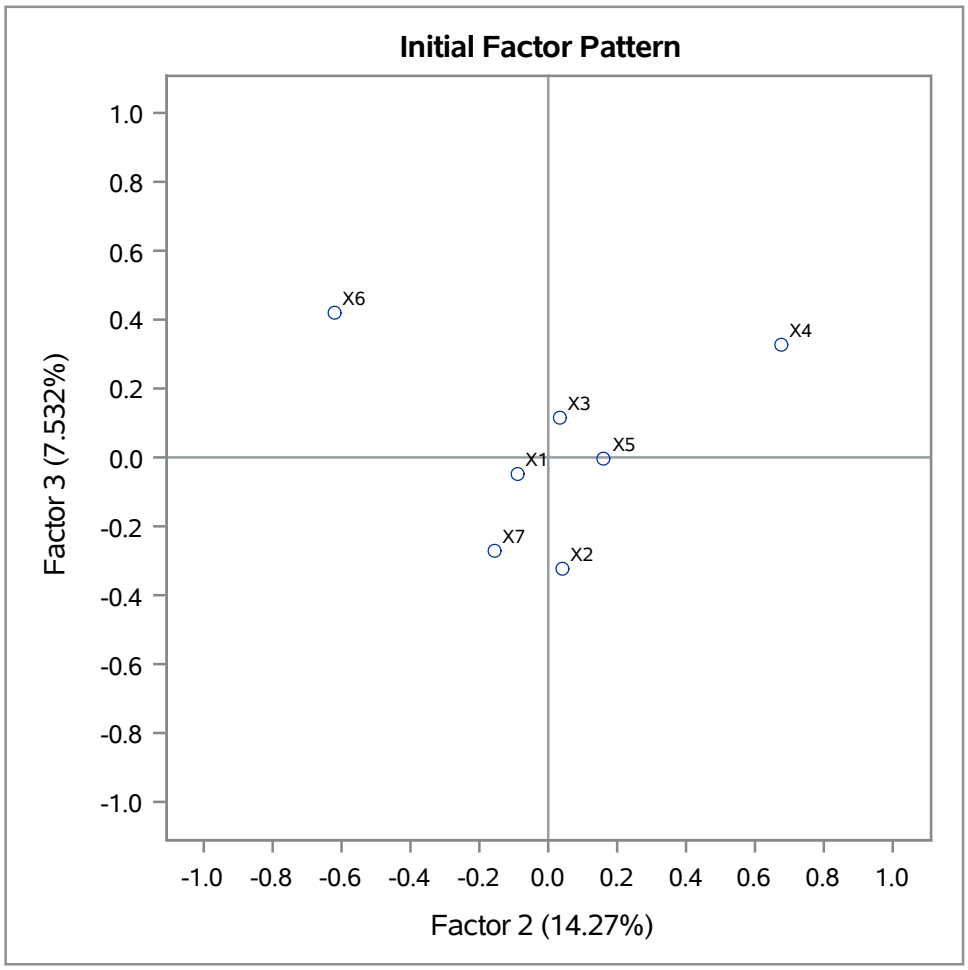
The FACTOR Procedure
Initial Factor Method: Iterated Principal Factor Analysis



The FACTOR Procedure
Initial Factor Method: Iterated Principal Factor Analysis



The FACTOR Procedure
Initial Factor Method: Iterated Principal Factor Analysis



The FACTOR Procedure
Rotation Method: Varimax

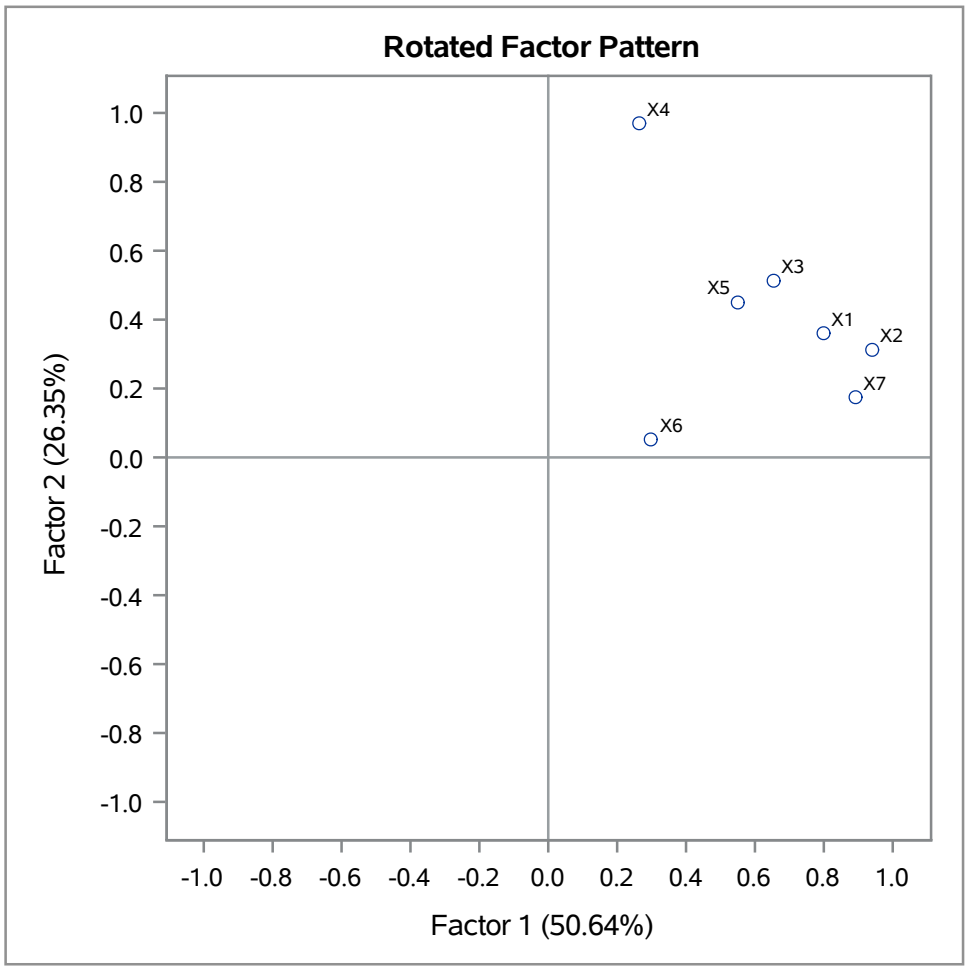
Orthogonal Transformation Matrix			
	1	2	3
1	0.78068	0.46289	0.41984
2	-0.07769	0.73850	-0.66976
3	-0.62008	0.49026	0.61250

Rotated Factor Pattern				
		Factor1	Factor2	Factor3
X1	Growth of Sales	0.79892	0.36032	0.43917
X2	Profitability of Sales	0.93878	0.31191	0.17615
X3	New Account Sales	0.65303	0.51348	0.44059
X4	Creativity	0.26334	0.96839	0.02734
X5	Mechanical Reasoning	0.55041	0.45107	0.19206
X6	Abstract Reasoning	0.29884	0.05183	0.94601
X7	Mathematical Ability	0.89026	0.17361	0.32155

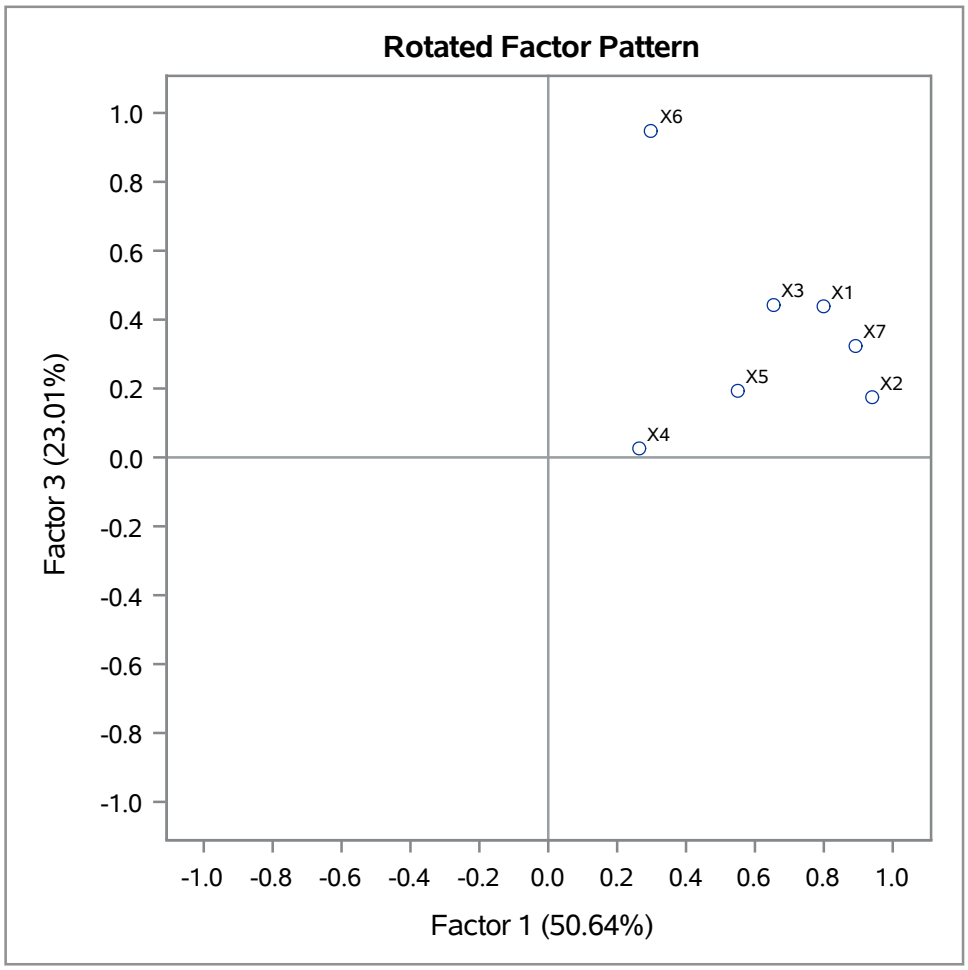
Variance Explained by Each Factor		
Factor1	Factor2	Factor3
3.2001820	1.6648642	1.4539816

Final Communality Estimates: Total = 6.319028						
X1	X2	X3	X4	X5	X6	X7
0.9609688	1.0096249	0.8842340	1.0078822	0.5432966	0.9869328	0.9260885

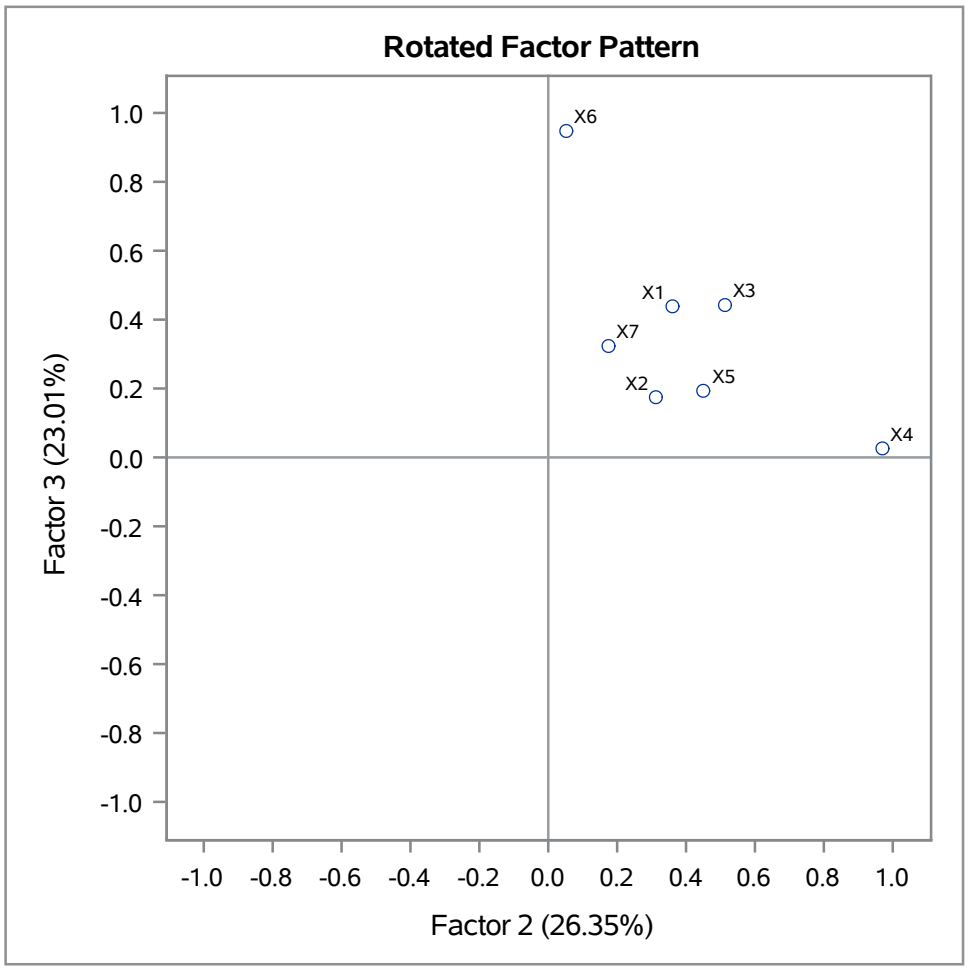
The FACTOR Procedure
Rotation Method: Varimax



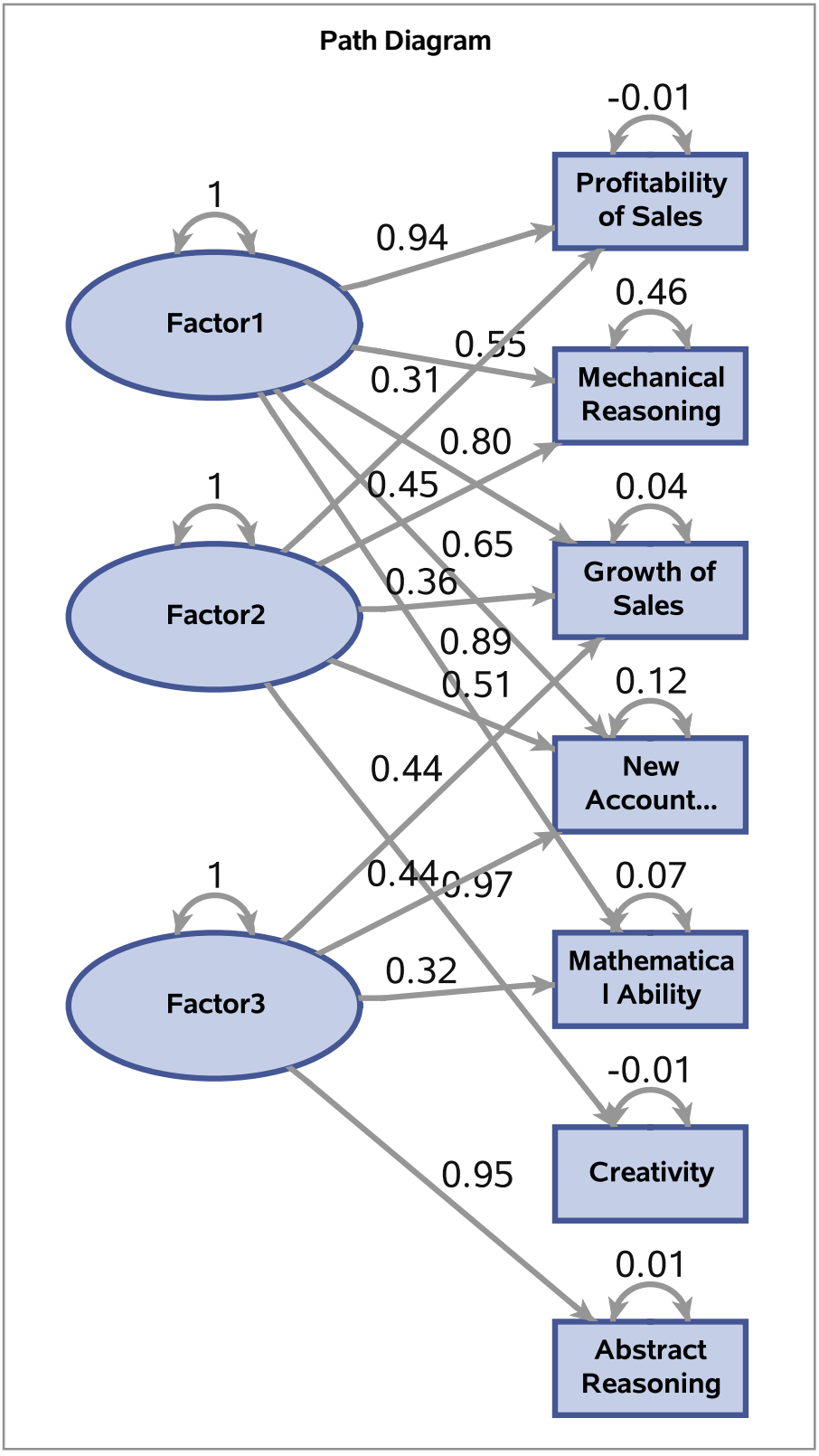
The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure

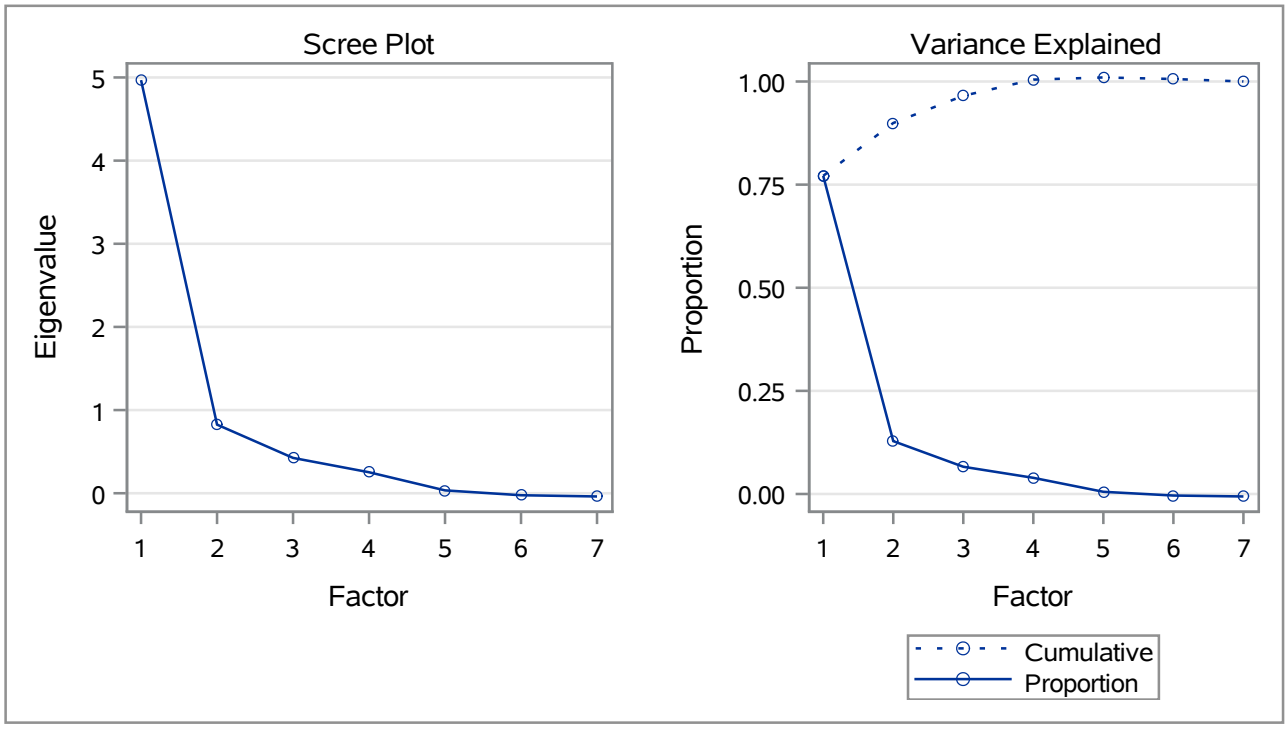
Input Data Type	Raw Data
Number of Records Read	50
Number of Records Used	50
N for Significance Tests	50

The FACTOR Procedure
Initial Factor Method: Principal Factors

Prior Communality Estimates: SMC						
X1	X2	X3	X4	X5	X6	X7
0.97154338	0.96837839	0.95390306	0.90511191	0.78074838	0.88487831	0.97679536

Eigenvalues of the Reduced Correlation Matrix: Total = 6.44135879 Average = 0.92019411				
	Eigenvalue	Difference	Proportion	Cumulative
1	4.96792617	4.14277662	0.7713	0.7713
2	0.82514955	0.40022321	0.1281	0.8994
3	0.42492634	0.17264667	0.0660	0.9653
4	0.25227967	0.21817160	0.0392	1.0045
5	0.03410807	0.05826526	0.0053	1.0098
6	-.02415719	0.01471663	-0.0038	1.0060
7	-.03887381		-0.0060	1.0000

3 factors will be retained by the NFACTOR criterion.



Factor Pattern				
		Factor1	Factor2	Factor3
X1	Growth of Sales	0.97433	-0.10262	-0.03235
X2	Profitability of Sales	0.94359	0.02976	-0.29851
X3	New Account Sales	0.94259	0.02670	0.15730
X4	Creativity	0.65116	0.63333	0.26421

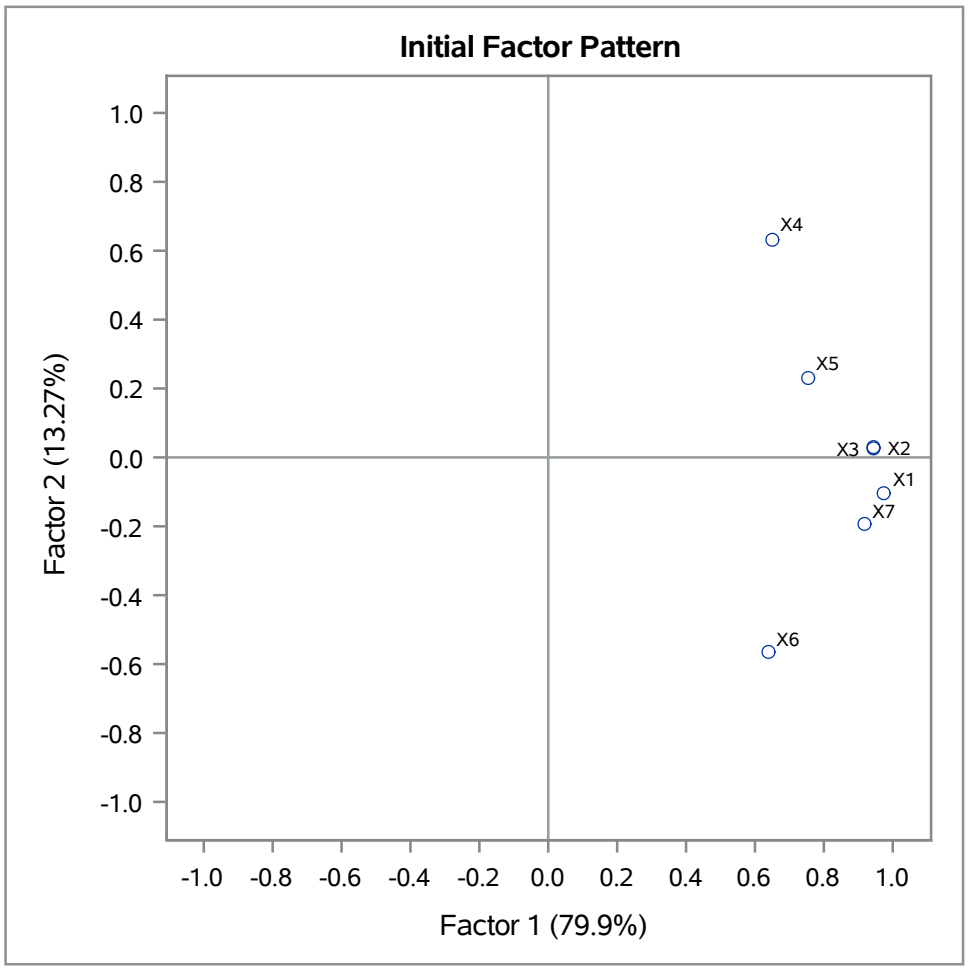
The FACTOR Procedure
Initial Factor Method: Principal Factors

Factor Pattern				
		Factor1	Factor2	Factor3
X5	Mechanical Reasoning	0.75293	0.23158	0.00721
X6	Abstract Reasoning	0.63832	-0.56596	0.39574
X7	Mathematical Ability	0.91728	-0.19488	-0.28907

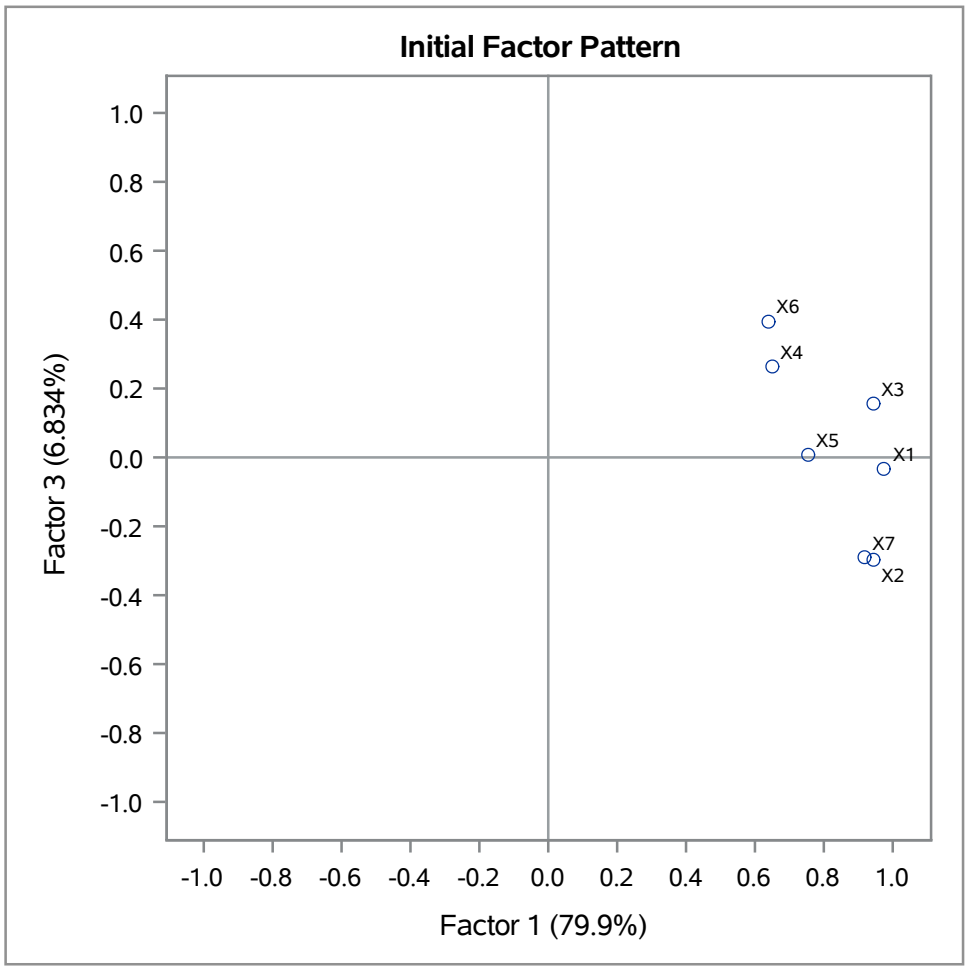
Variance Explained by Each Factor		
Factor1	Factor2	Factor3
4.9679262	0.8251495	0.4249263

Final Communality Estimates: Total = 6.218002						
X1	X2	X3	X4	X5	X6	X7
0.96089672	0.98035831	0.91393644	0.89491569	0.62058699	0.88436963	0.96293828

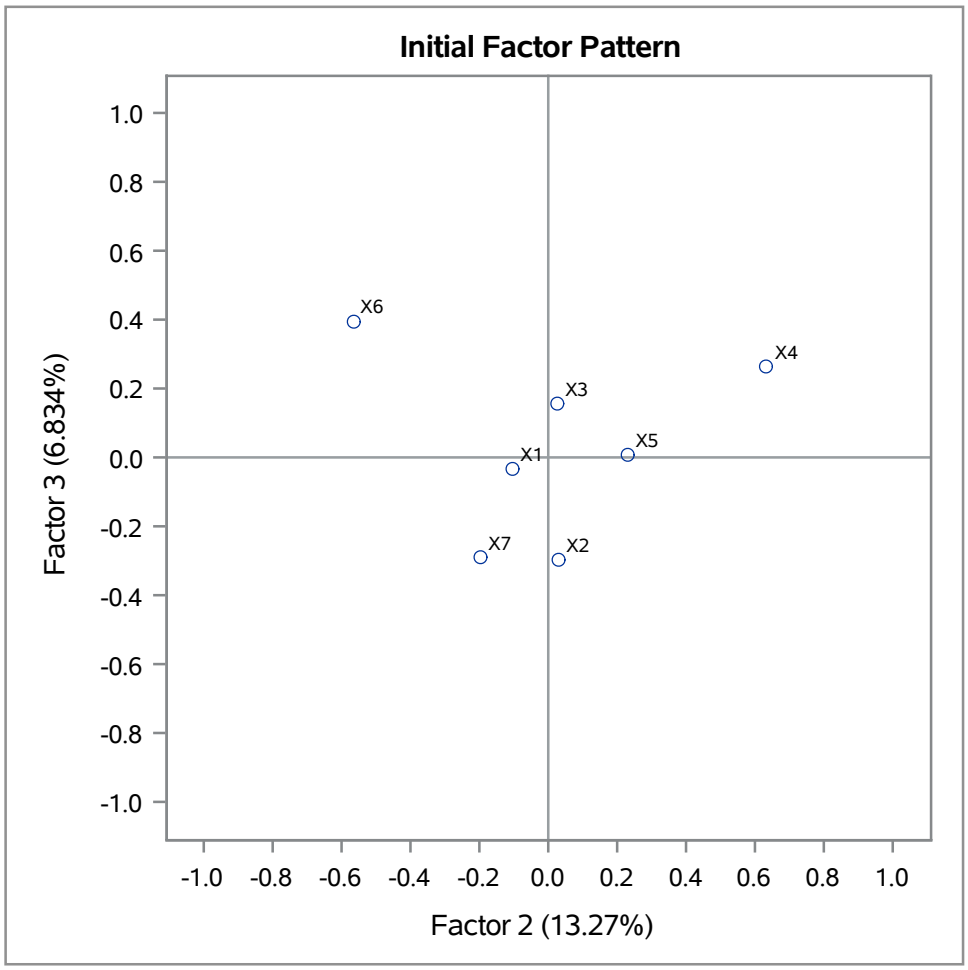
The FACTOR Procedure
Initial Factor Method: Principal Factors



The FACTOR Procedure
Initial Factor Method: Principal Factors



The FACTOR Procedure
Initial Factor Method: Principal Factors



The FACTOR Procedure
Rotation Method: Varimax

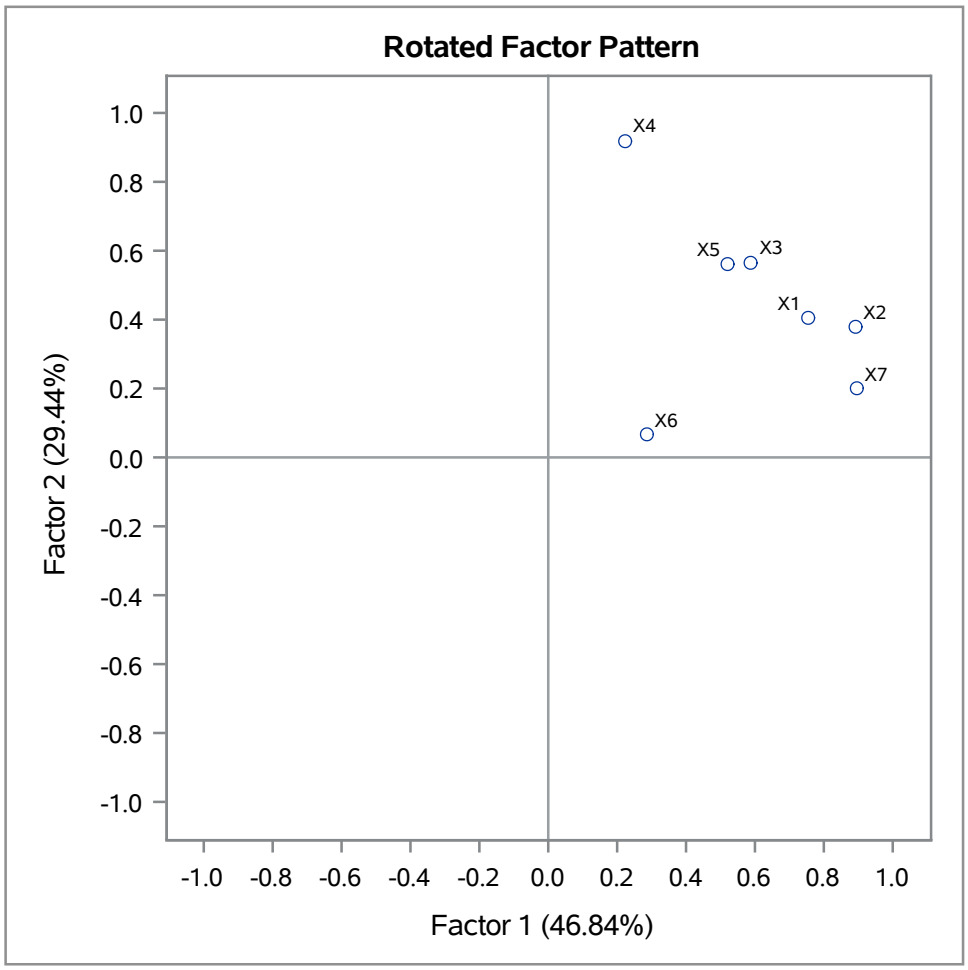
Orthogonal Transformation Matrix			
	1	2	3
1	0.73890	0.50958	0.44086
2	-0.13221	0.75120	-0.64670
3	-0.66072	0.41955	0.62243

Rotated Factor Pattern				
		Factor1	Factor2	Factor3
X1	Growth of Sales	0.75487	0.40584	0.47578
X2	Profitability of Sales	0.89051	0.37795	0.21095
X3	New Account Sales	0.58902	0.56638	0.49620
X4	Creativity	0.22283	0.91842	0.04196
X5	Mechanical Reasoning	0.52096	0.56067	0.18666
X6	Abstract Reasoning	0.28501	0.06616	0.89374
X7	Mathematical Ability	0.89453	0.19975	0.35050

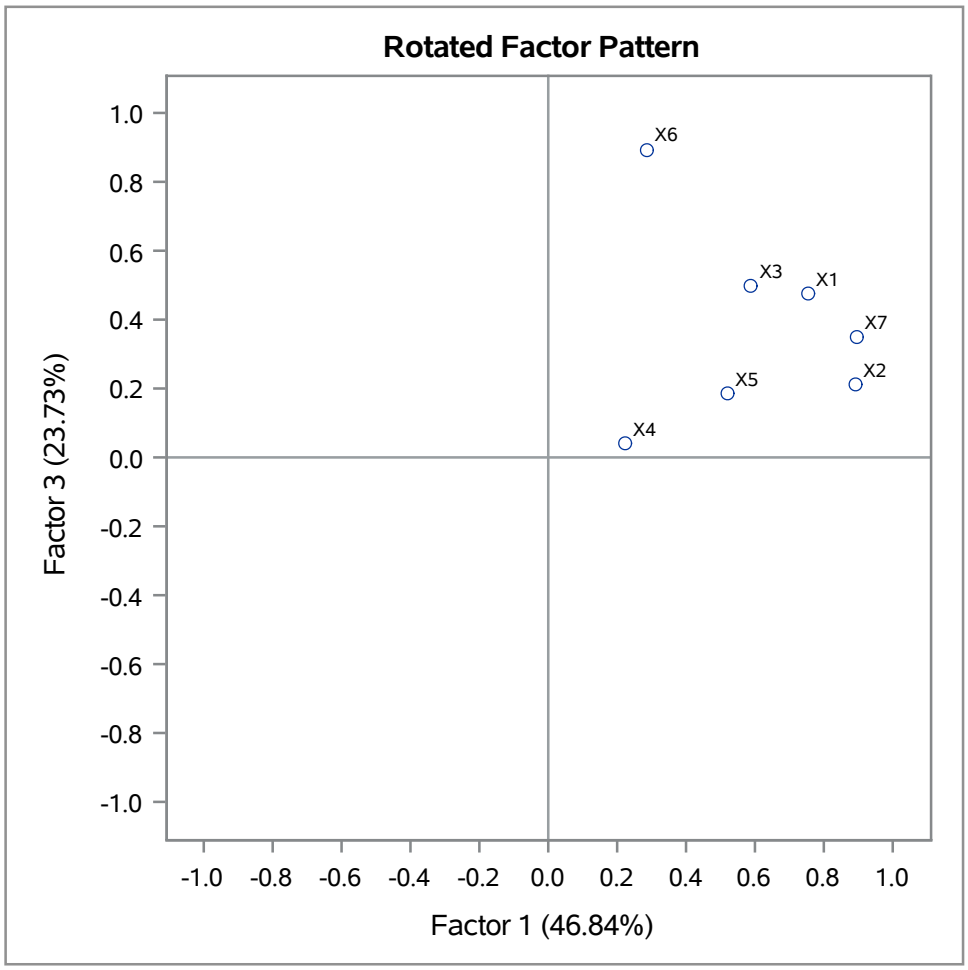
Variance Explained by Each Factor		
Factor1	Factor2	Factor3
2.9122481	1.8304664	1.4752876

Final Communality Estimates: Total = 6.218002						
X1	X2	X3	X4	X5	X6	X7
0.96089672	0.98035831	0.91393644	0.89491569	0.62058699	0.88436963	0.96293828

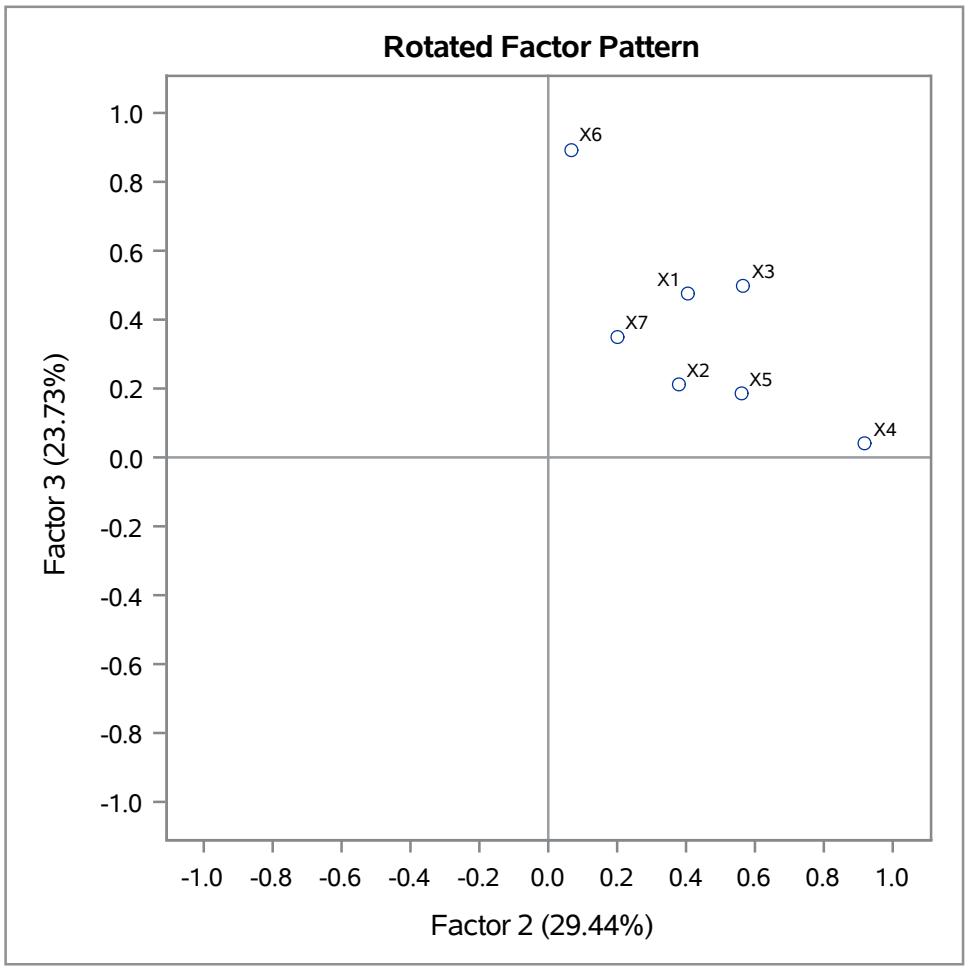
The FACTOR Procedure
Rotation Method: Varimax



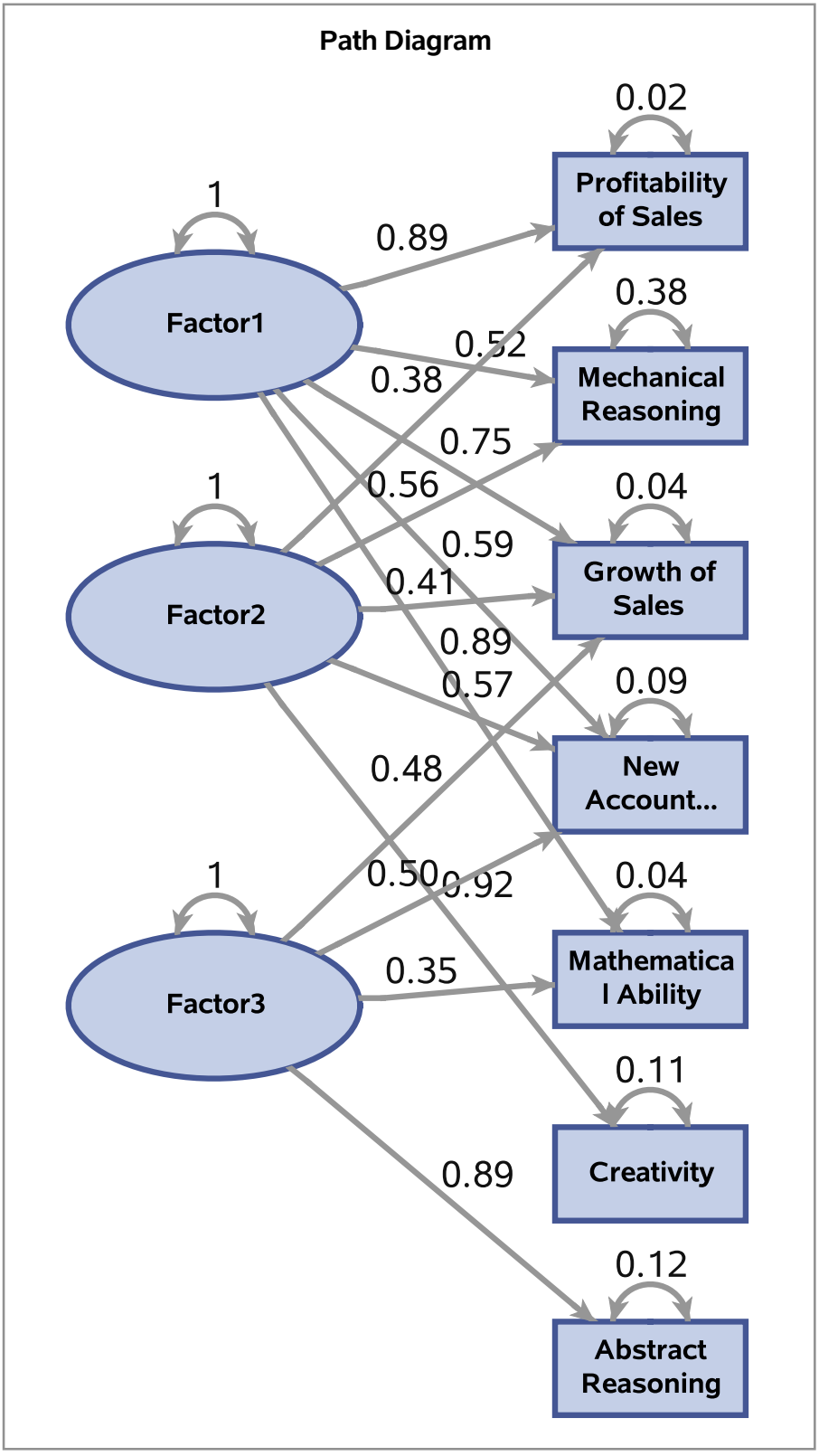
The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure

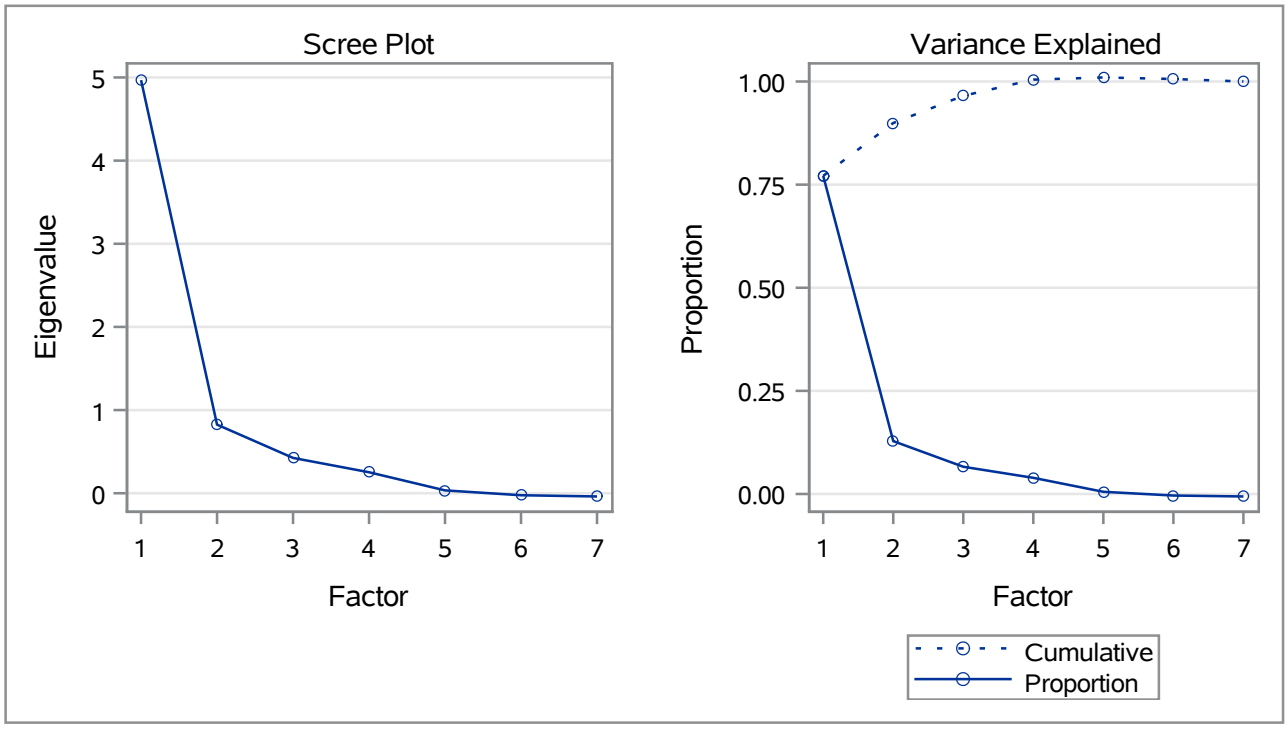
Input Data Type	Raw Data
Number of Records Read	50
Number of Records Used	50
N for Significance Tests	50

The FACTOR Procedure
Initial Factor Method: Principal Factors

Prior Communality Estimates: SMC						
X1	X2	X3	X4	X5	X6	X7
0.97154338	0.96837839	0.95390306	0.90511191	0.78074838	0.88487831	0.97679536

Eigenvalues of the Reduced Correlation Matrix: Total = 6.44135879 Average = 0.92019411				
	Eigenvalue	Difference	Proportion	Cumulative
1	4.96792617	4.14277662	0.7713	0.7713
2	0.82514955	0.40022321	0.1281	0.8994
3	0.42492634	0.17264667	0.0660	0.9653
4	0.25227967	0.21817160	0.0392	1.0045
5	0.03410807	0.05826526	0.0053	1.0098
6	-.02415719	0.01471663	-0.0038	1.0060
7	-.03887381		-0.0060	1.0000

4 factors will be retained by the NFACTOR criterion.



Factor Pattern					
		Factor1	Factor2	Factor3	Factor4
X1	Growth of Sales	0.97433	-0.10262	-0.03235	0.01347
X2	Profitability of Sales	0.94359	0.02976	-0.29851	0.05376
X3	New Account Sales	0.94259	0.02670	0.15730	-0.20097
X4	Creativity	0.65116	0.63333	0.26421	-0.12047

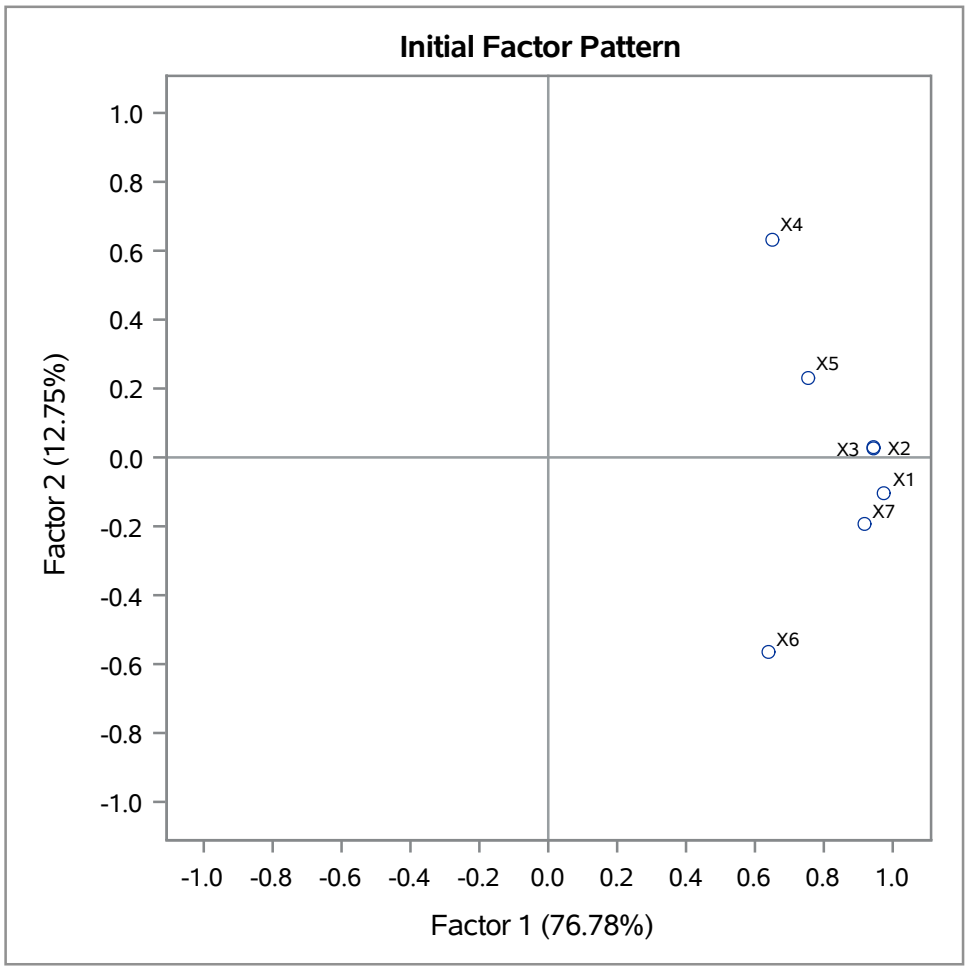
The FACTOR Procedure
Initial Factor Method: Principal Factors

Factor Pattern					
		Factor1	Factor2	Factor3	Factor4
X5	Mechanical Reasoning	0.75293	0.23158	0.00721	0.40290
X6	Abstract Reasoning	0.63832	-0.56596	0.39574	0.07660
X7	Mathematical Ability	0.91728	-0.19488	-0.28907	-0.16159

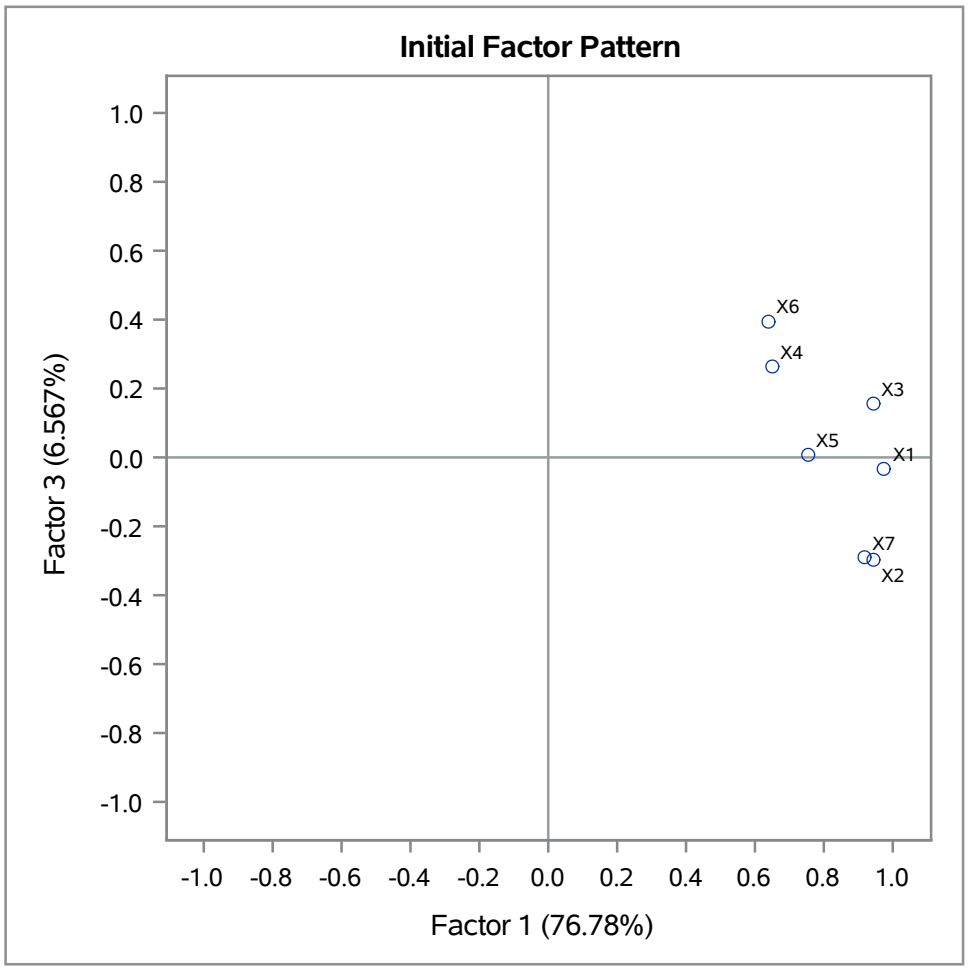
Variance Explained by Each Factor			
Factor1	Factor2	Factor3	Factor4
4.9679262	0.8251495	0.4249263	0.2522797

Final Communality Estimates: Total = 6.470282						
X1	X2	X3	X4	X5	X6	X7
0.96107810	0.98324848	0.95432557	0.90942843	0.78291535	0.89023674	0.98904904

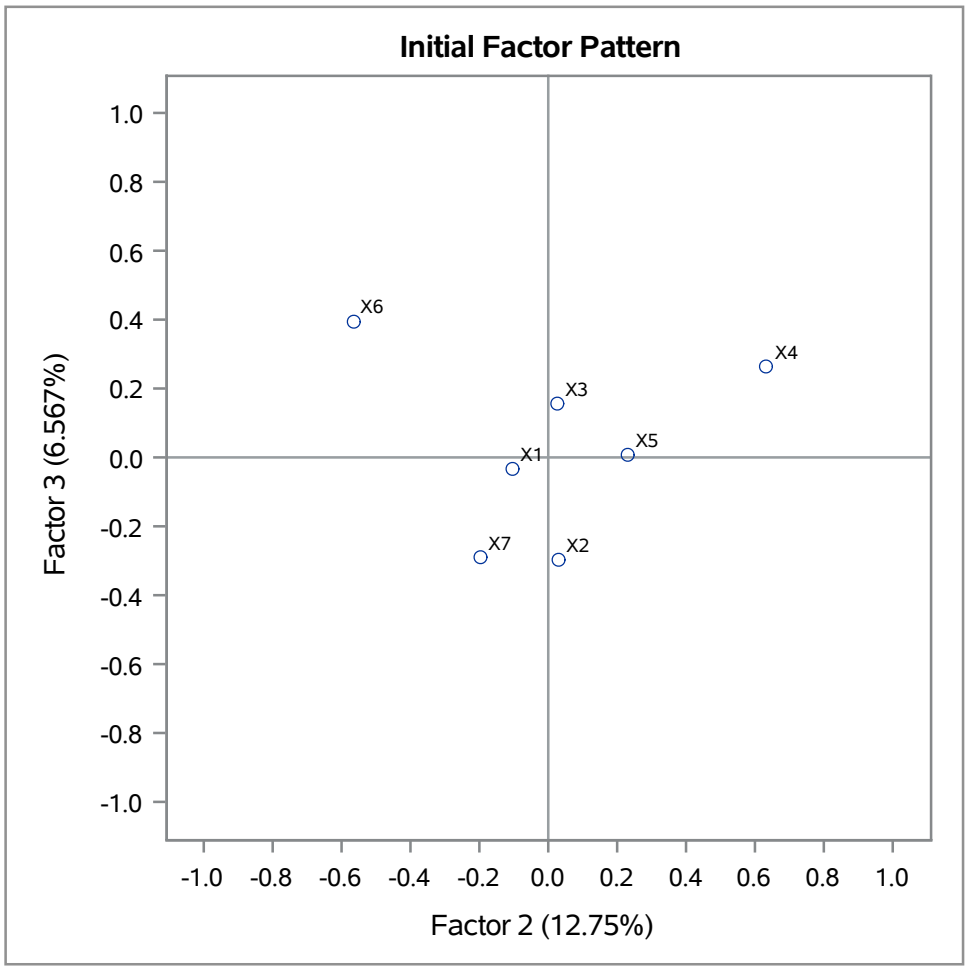
The FACTOR Procedure
Initial Factor Method: Principal Factors



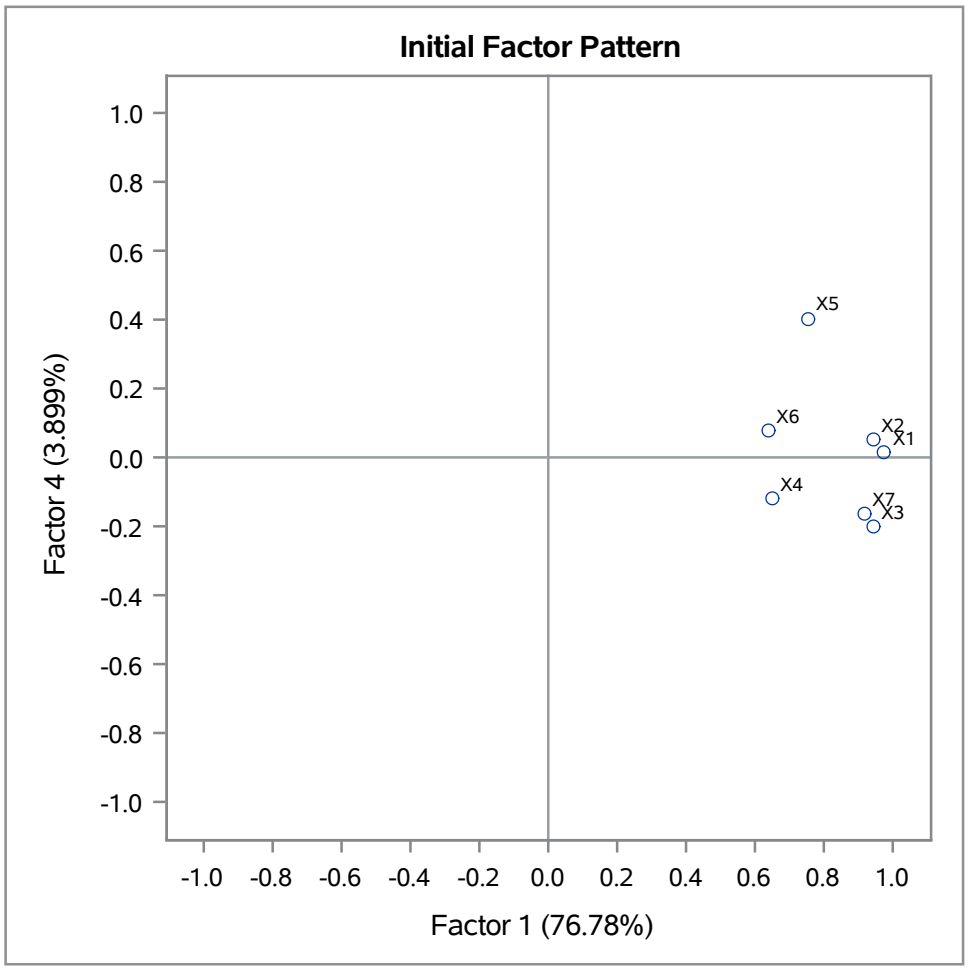
The FACTOR Procedure
Initial Factor Method: Principal Factors



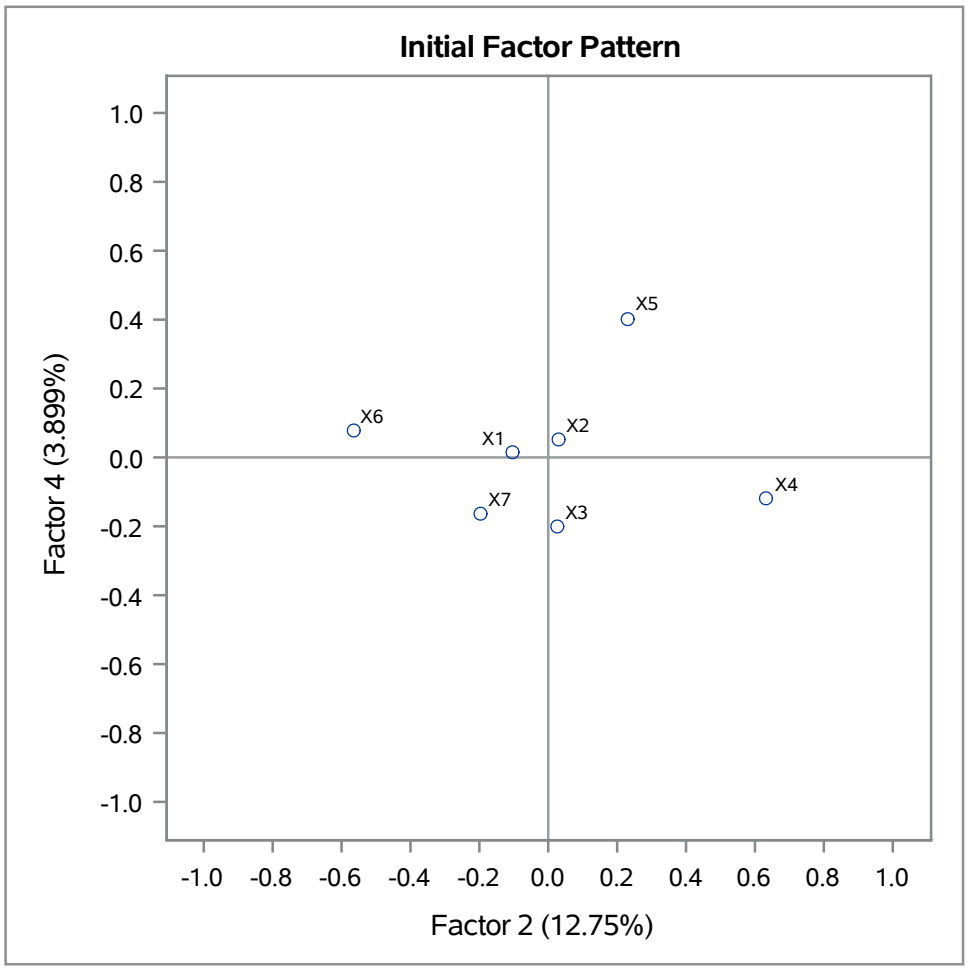
The FACTOR Procedure
Initial Factor Method: Principal Factors



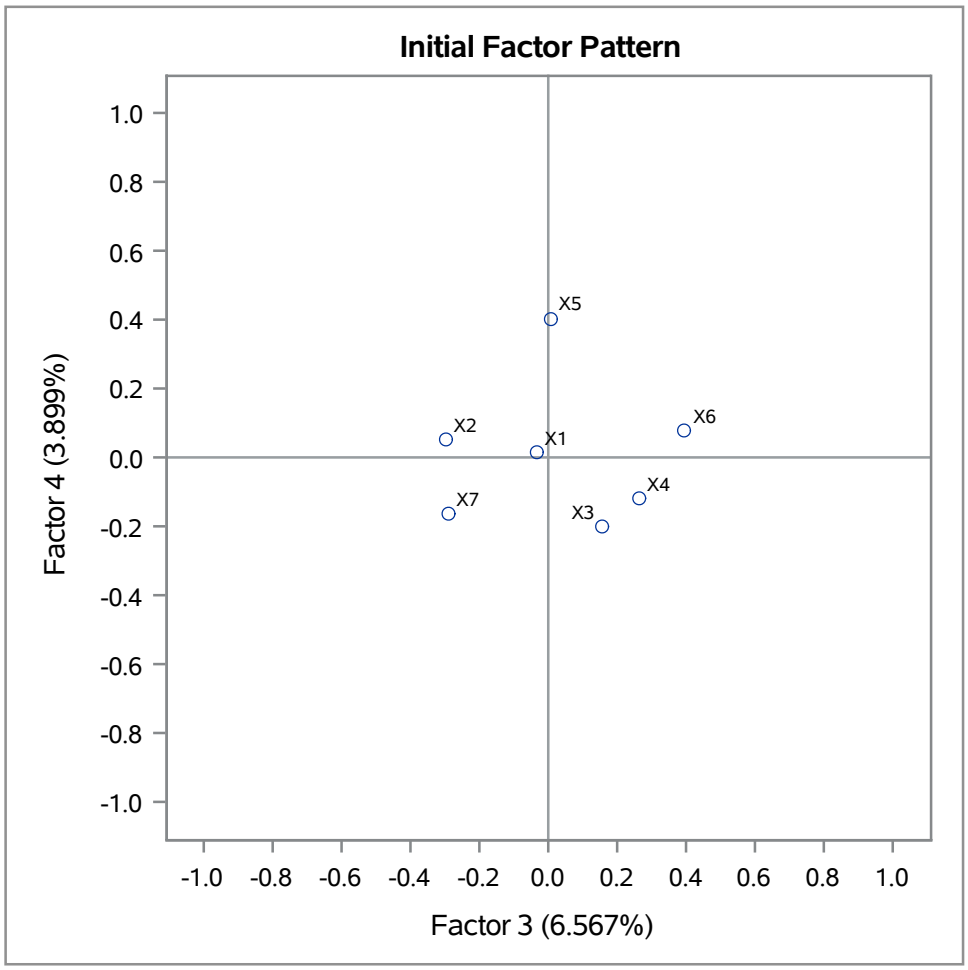
The FACTOR Procedure
Initial Factor Method: Principal Factors



The FACTOR Procedure
Initial Factor Method: Principal Factors



The FACTOR Procedure
Initial Factor Method: Principal Factors



The FACTOR Procedure
Rotation Method: Varimax

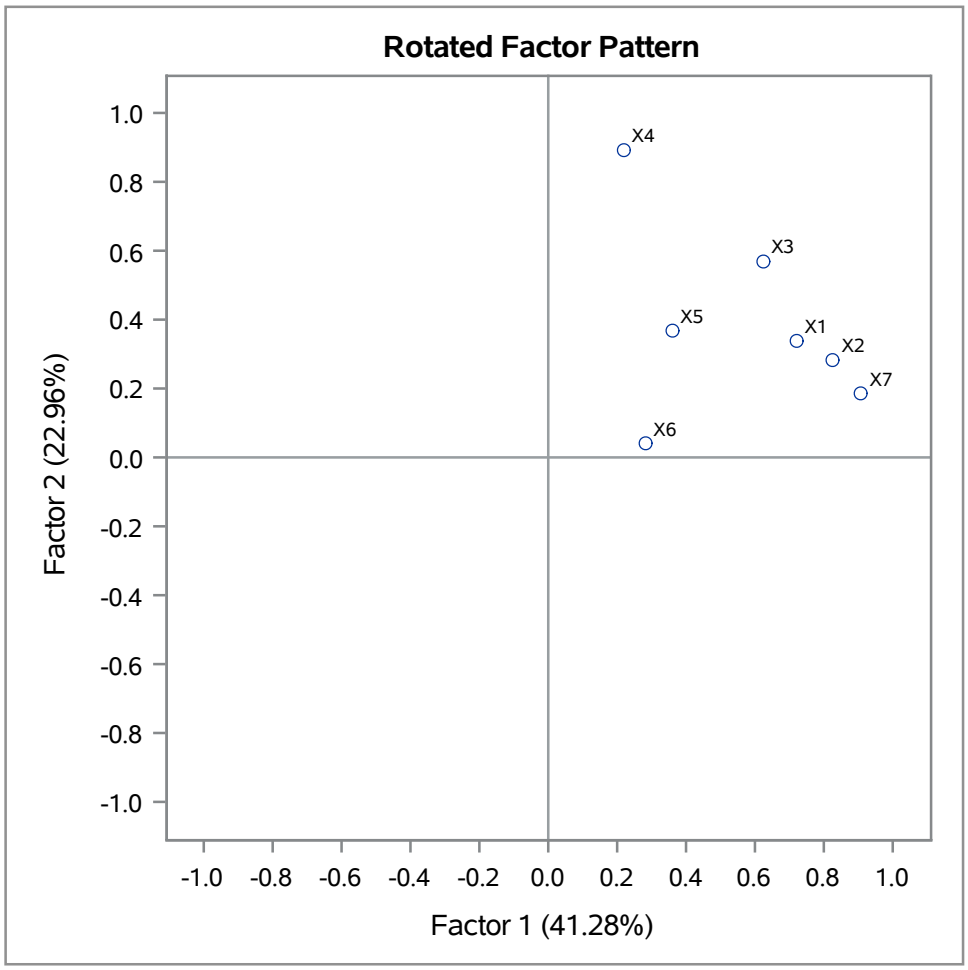
Orthogonal Transformation Matrix				
	1	2	3	4
1	0.70368	0.44014	0.41703	0.37040
2	-0.17952	0.70356	-0.64682	0.23325
3	-0.61537	0.45727	0.63570	-0.09005
4	-0.30649	-0.31965	0.05997	0.89459

Rotated Factor Pattern					
		Factor1	Factor2	Factor3	Factor4
X1	Growth of Sales	0.71981	0.33755	0.45295	0.35192
X2	Profitability of Sales	0.82586	0.28257	0.18772	0.43142
X3	New Account Sales	0.62329	0.56983	0.46376	0.16141
X4	Creativity	0.21885	0.89151	0.02264	0.25735
X5	Mechanical Reasoning	0.36033	0.36884	0.19295	0.69268
X6	Abstract Reasoning	0.28377	0.03924	0.88844	0.13731
X7	Mathematical Ability	0.90786	0.18609	0.31514	0.17578

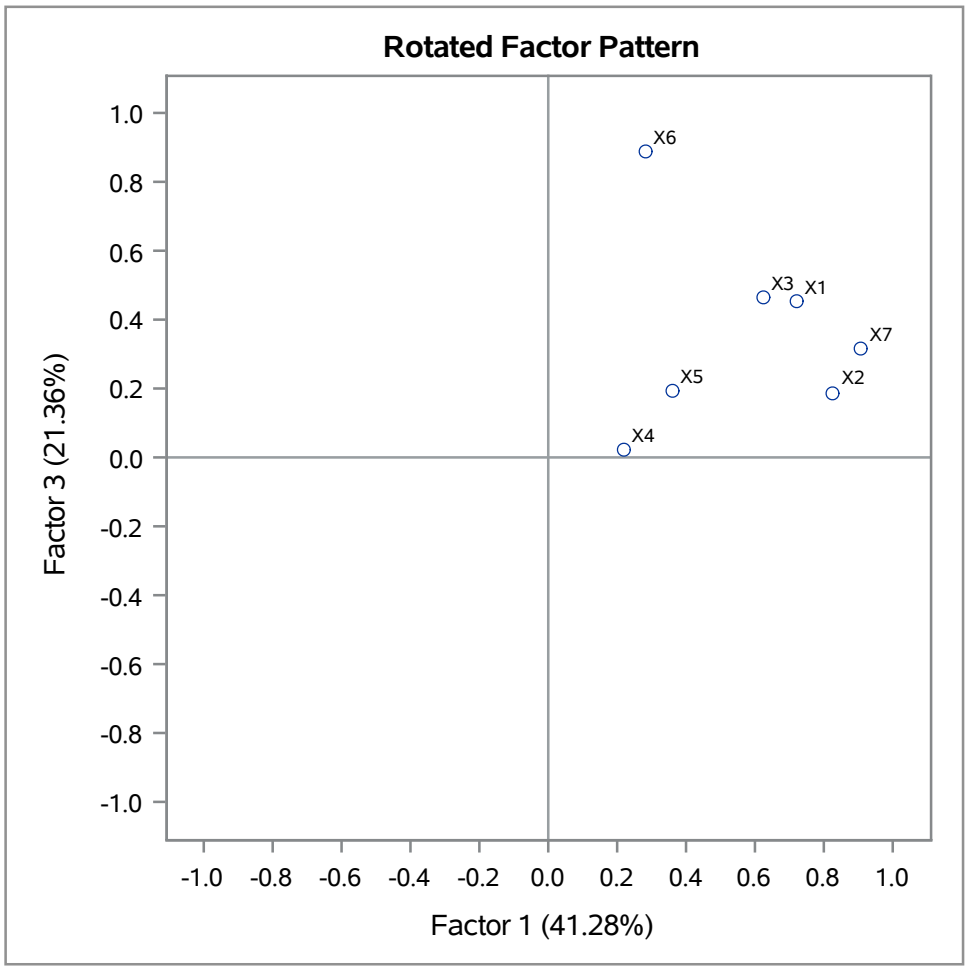
Variance Explained by Each Factor			
Factor1	Factor2	Factor3	Factor4
2.6711226	1.4854945	1.3818451	0.9318195

Final Communality Estimates: Total = 6.470282						
X1	X2	X3	X4	X5	X6	X7
0.96107810	0.98324848	0.95432557	0.90942843	0.78291535	0.89023674	0.98904904

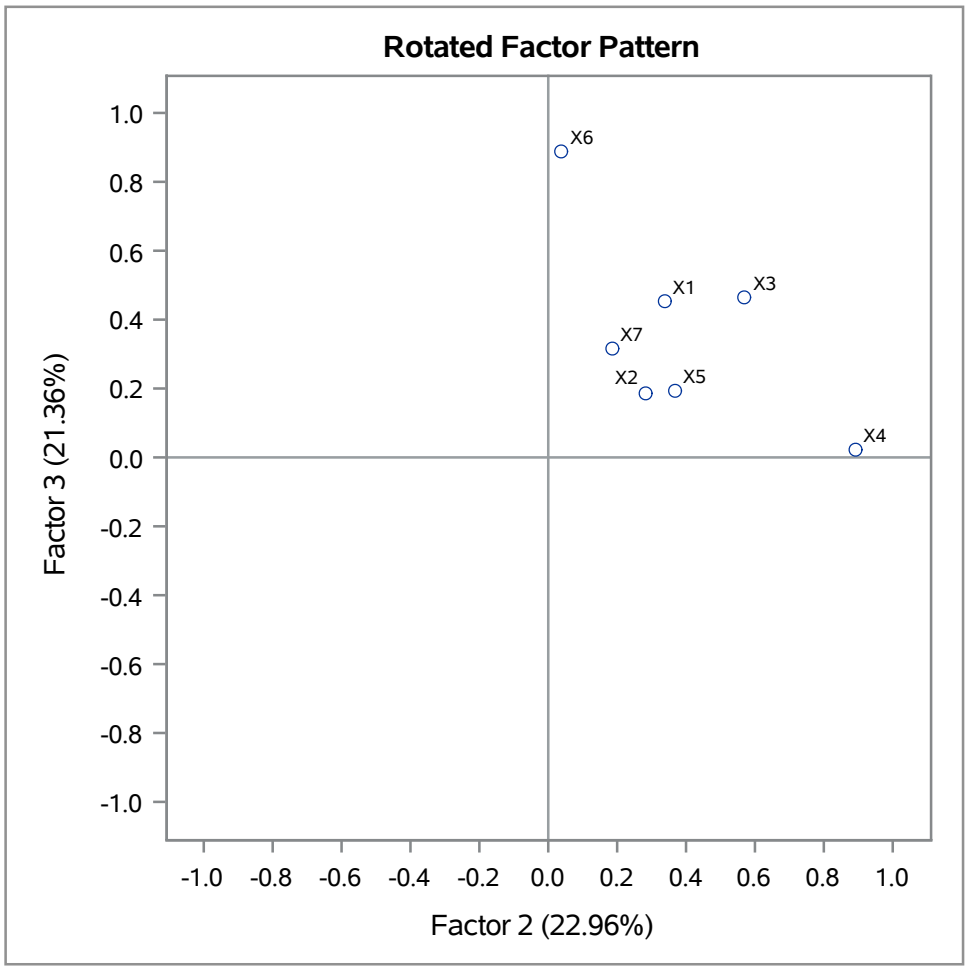
The FACTOR Procedure
Rotation Method: Varimax



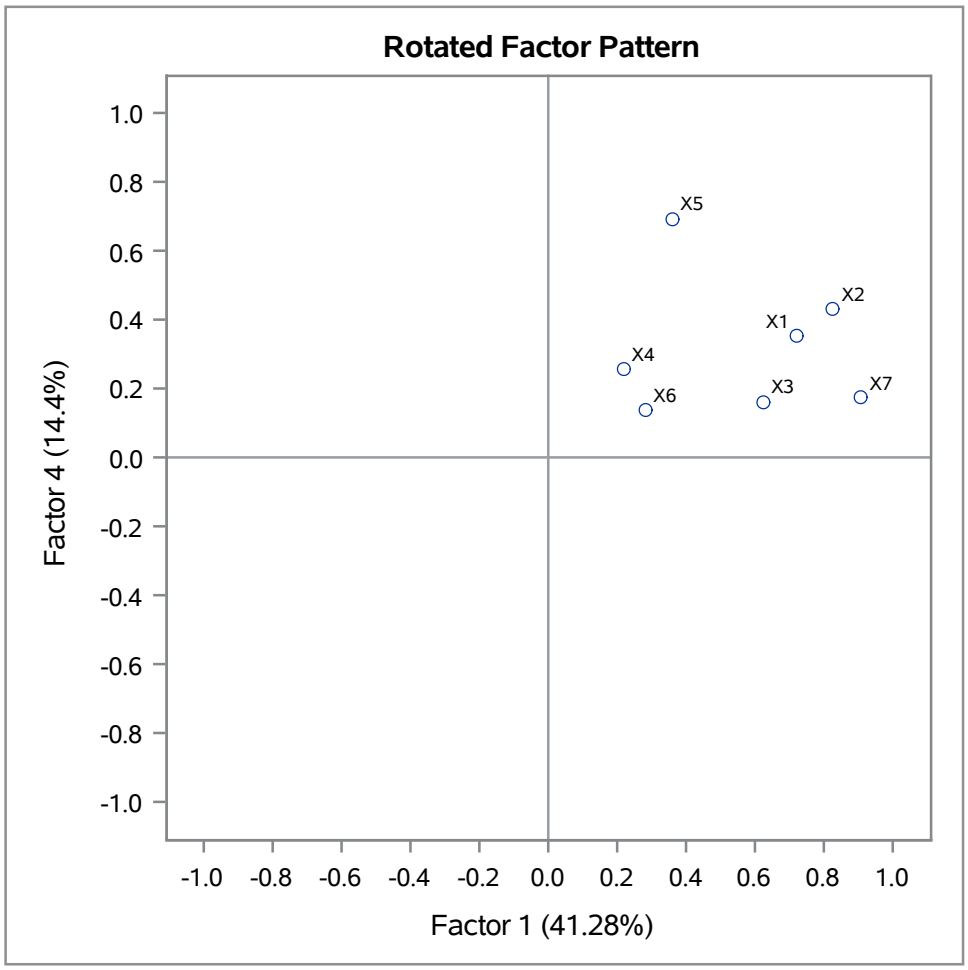
The FACTOR Procedure
Rotation Method: Varimax



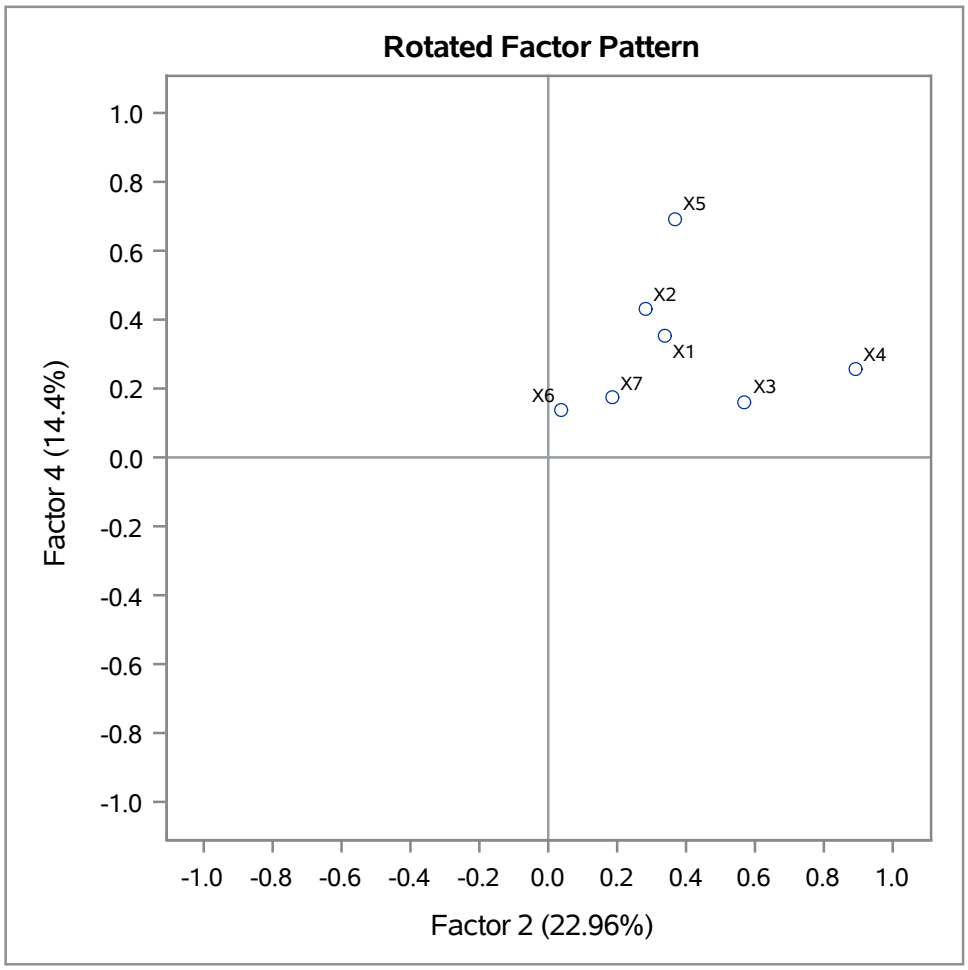
The FACTOR Procedure
Rotation Method: Varimax



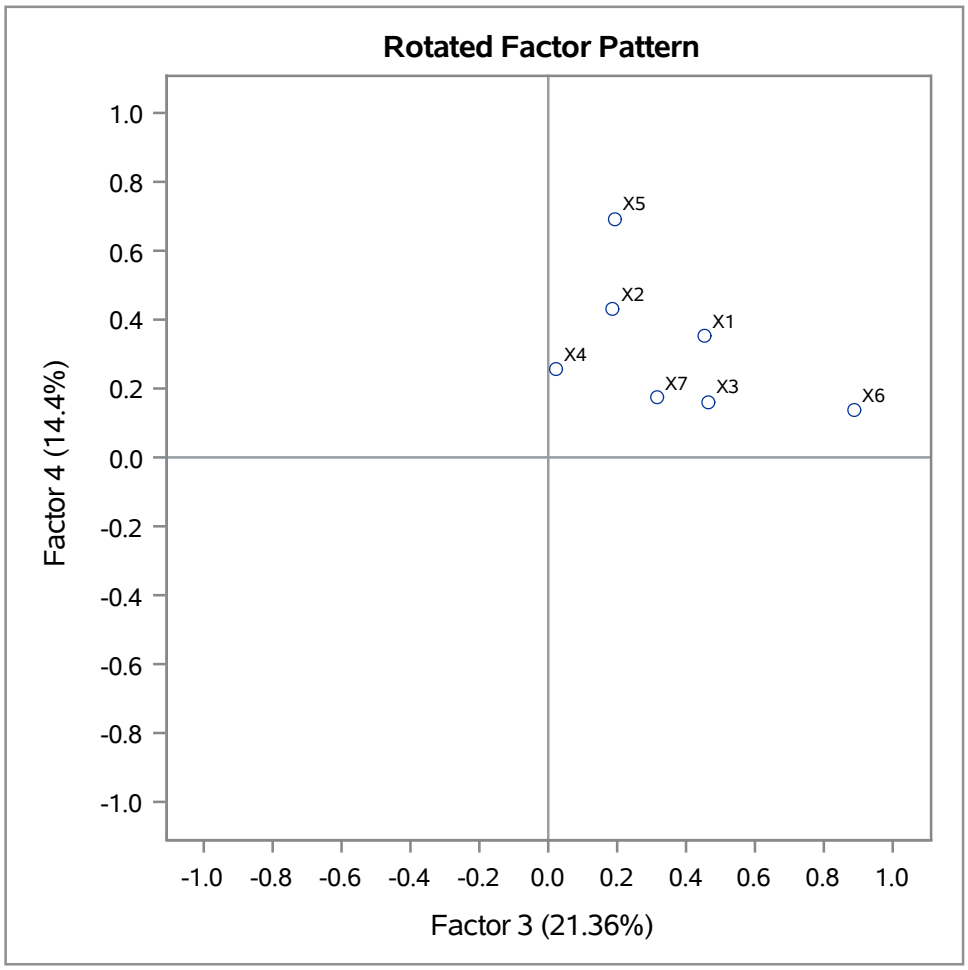
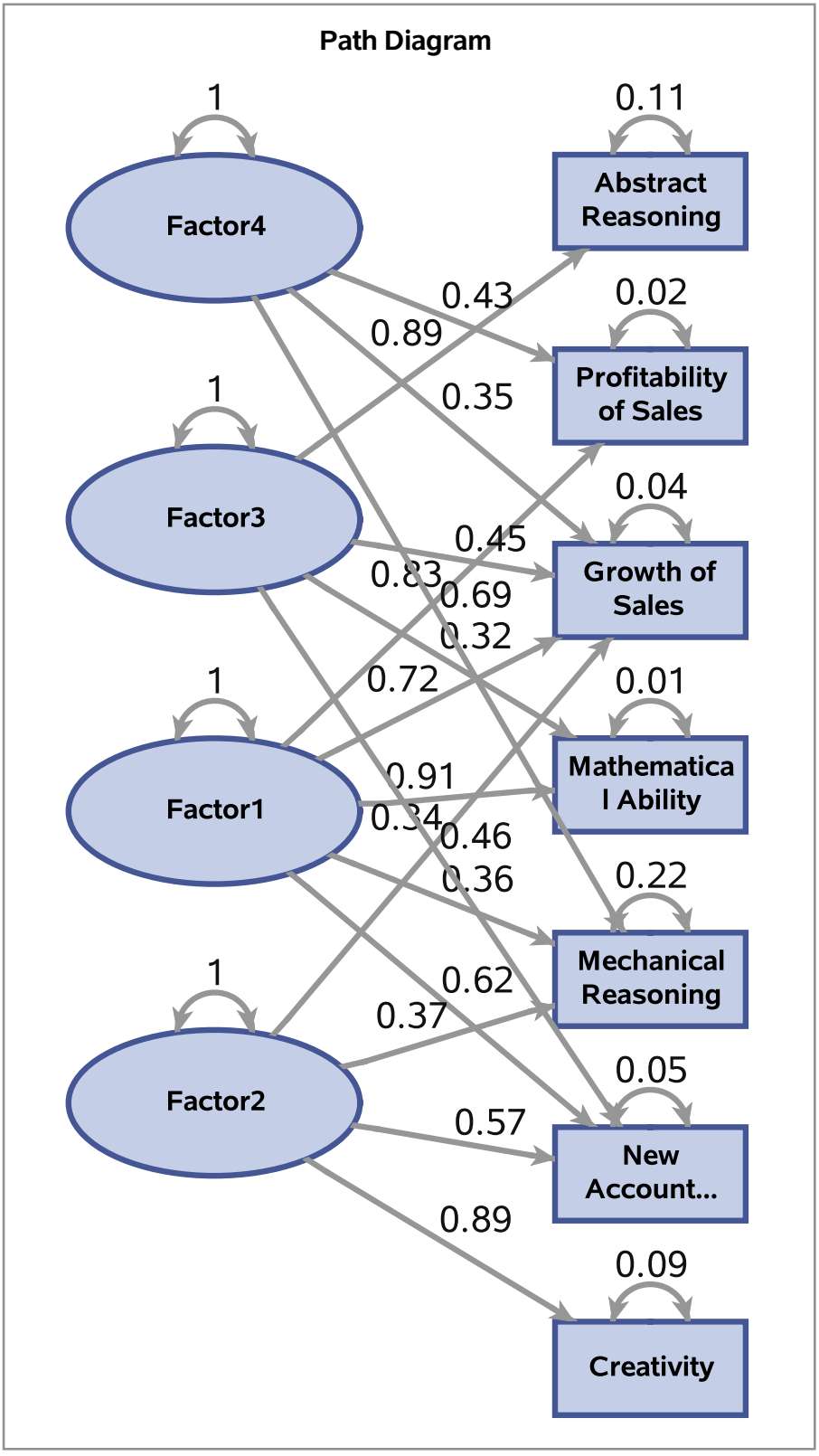
The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax



The FACTOR Procedure
Rotation Method: Varimax