

FACTOR

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/VARIABLES P1 P2 P3 E1 E2 E3 R1 R2 R3 M1 M2 M3 A1 A2 A3
/MISSING LISTWISE
/ANALYSIS P1 P2 P3 E1 E2 E3 R1 R2 R3 M1 M2 M3 A1 A2 A3
/PRINT INITIAL SIG KMO
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PAF
/ROTATION NOROTATE
/METHOD=COVARIANCE.

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## Factor Analysis - Initial

### KMO and Bartlett's Test<sup>a</sup>

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	1366.587
	df	105
	Sig.	.000

a. Based on correlations

### Correlation Matrix

		P1	P2	P3	E1	E2	E3	R1
Sig. (1-tailed)	P1		.000	.000	.000	.000	.144	.000
	P2	.000		.000	.000	.000	.016	.000
	P3	.000	.000		.000	.000	.119	.000
	E1	.000	.000	.000		.000	.000	.004
	E2	.000	.000	.000	.000		.003	.000
	E3	.144	.016	.119	.000	.003		.260
	R1	.000	.000	.000	.004	.000	.260	
	R2	.000	.000	.000	.000	.000	.050	.000
	R3	.000	.000	.000	.000	.000	.007	.000
	M1	.000	.000	.000	.000	.000	.249	.000
	M2	.000	.000	.000	.000	.000	.454	.000
	M3	.000	.000	.000	.003	.000	.481	.000
	A1	.000	.000	.000	.000	.000	.121	.000
	A2	.000	.000	.000	.000	.000	.078	.000
	A3	.000	.000	.000	.000	.000	.308	.004

### Correlation Matrix

		R2	R3	M1	M2	M3	A1	A2
Sig. (1-tailed)	P1	.000	.000	.000	.000	.000	.000	.000
	P2	.000	.000	.000	.000	.000	.000	.000
	P3	.000	.000	.000	.000	.000	.000	.000
	E1	.000	.000	.000	.000	.003	.000	.000
	E2	.000	.000	.000	.000	.000	.000	.000
	E3	.050	.007	.249	.454	.481	.121	.078
	R1	.000	.000	.000	.000	.000	.000	.000
	R2		.000	.000	.000	.000	.000	.000
	R3	.000		.000	.000	.000	.000	.000
	M1	.000	.000		.000	.000	.000	.000
	M2	.000	.000	.000		.000	.000	.000
	M3	.000	.000	.000	.000		.000	.000
	A1	.000	.000	.000	.000	.000		.000
	A2	.000	.000	.000	.000	.000	.000	
	A3	.000	.001	.000	.000	.000	.000	.000

### Correlation Matrix

		A3
Sig. (1-tailed)	P1	.000
	P2	.000
	P3	.000
	E1	.000
	E2	.000
	E3	.308
	R1	.004
	R2	.000
	R3	.001
	M1	.000
	M2	.000
	M3	.000
	A1	.000
	A2	.000
	A3	

### Communalities

	Raw Initial	Rescaled Initial
P1	3.627	.569
P2	3.398	.661
P3	2.723	.569
E1	1.899	.371
E2	2.454	.534
E3	.847	.166
R1	2.536	.409
R2	3.193	.507
R3	3.439	.446
M1	3.640	.671
M2	4.226	.656
M3	3.805	.611
A1	2.571	.613
A2	2.719	.558
A3	1.390	.355

Extraction Method: Principal  
Axis Factoring.

## Total Variance Explained

	Factor	Total	Initial Eigenvalues <sup>a</sup>	
			% of Variance	Cumulative %
Raw	1	37.757	45.814	45.814
	2	7.252	8.799	54.613
	3	6.401	7.767	62.380
	4	4.776	5.796	68.175
	5	4.643	5.634	73.810
	6	3.743	4.541	78.351
	7	3.287	3.988	82.340
	8	2.799	3.396	85.736
	9	2.601	3.156	88.891
	10	1.983	2.407	91.298
	11	1.807	2.193	93.491
	12	1.563	1.897	95.388
	13	1.472	1.786	97.173
	14	1.262	1.532	98.705
	15	1.067	1.295	100.000
Rescaled	1	37.757	45.814	45.814
	2	7.252	8.799	54.613
	3	6.401	7.767	62.380
	4	4.776	5.796	68.175
	5	4.643	5.634	73.810
	6	3.743	4.541	78.351
	7	3.287	3.988	82.340
	8	2.799	3.396	85.736
	9	2.601	3.156	88.891
	10	1.983	2.407	91.298
	11	1.807	2.193	93.491
	12	1.563	1.897	95.388
	13	1.472	1.786	97.173
	14	1.262	1.532	98.705
	15	1.067	1.295	100.000

Extraction Method: Principal Axis Factoring.

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

## Factor Matrix<sup>a</sup>

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a. 3 factors extracted. 10 iterations required.

FACTOR

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/VARIABLES P1 P2 P3 E1 E2 R2 R3 M1 M2 M3 A1 A2
/MISSING LISTWISE
/ANALYSIS P1 P2 P3 E1 E2 R2 R3 M1 M2 M3 A1 A2
/PRINT INITIAL KMO EXTRACTION ROTATION
/PLOT EIGEN ROTATION
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PAF
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=COVARIANCE.
```

## Factor Analysis without low communality variables

### KMO and Bartlett's Test<sup>a</sup>

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.906
Bartlett's Test of Sphericity	Approx. Chi-Square	1179.652
	df	66
	Sig.	.000

a. Based on correlations

### Communalities

	Raw		Rescaled	
	Initial	Extraction	Initial	Extraction
P1	3.586	3.000	.562	.470
P2	3.353	3.289	.652	.640
P3	2.677	2.836	.560	.593
E1	1.720	1.006	.336	.197
E2	2.391	2.209	.520	.481
R2	2.659	3.195	.422	.507
R3	3.345	4.678	.433	.606
M1	3.446	3.611	.635	.666
M2	4.059	4.242	.630	.659
M3	3.747	3.525	.602	.566
A1	2.526	2.330	.602	.555
A2	2.621	2.304	.538	.473

Extraction Method: Principal Axis Factoring.

### Total Variance Explained

	Factor	Total	Initial Eigenvalues <sup>a</sup>		Extraction Sums of Squared ..	
			% of Variance	Cumulative %	Total	% of Variance
Raw	1	34.839	51.858	51.858	32.353	48.156
	2	6.712	9.990	61.848	3.873	5.765
	3	4.929	7.336	69.184		
	4	4.388	6.531	75.715		
	5	3.405	5.069	80.784		
	6	2.733	4.069	84.853		
	7	2.262	3.367	88.220		
	8	2.040	3.036	91.256		
	9	1.817	2.705	93.961		
	10	1.542	2.295	96.256		
	11	1.420	2.113	98.369		
	12	1.096	1.631	100.000		
Rescaled	1	34.839	51.858	51.858	5.816	48.470
	2	6.712	9.990	61.848	.597	4.972
	3	4.929	7.336	69.184		
	4	4.388	6.531	75.715		
	5	3.405	5.069	80.784		

### Total Variance Explained

	Factor	Extraction Sums ...	Rotation Sums of Squared Loadings		
		Cumulative %	Total	% of Variance	Cumulative %
Raw	1	48.156	23.347	34.752	34.752
	2	53.922	12.879	19.170	53.922
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
Rescaled	1	48.470	4.309	35.905	35.905
	2	53.443	2.104	17.537	53.443
	3				
	4				
	5				

### Total Variance Explained

Factor	Total	Initial Eigenvalues <sup>a</sup>			Extraction Sums of Squared ..	
		% of Variance	Cumulative %		Total	% of Variance
6	2.733	4.069	84.853			
7	2.262	3.367	88.220			
8	2.040	3.036	91.256			
9	1.817	2.705	93.961			
10	1.542	2.295	96.256			
11	1.420	2.113	98.369			
12	1.096	1.631	100.000			

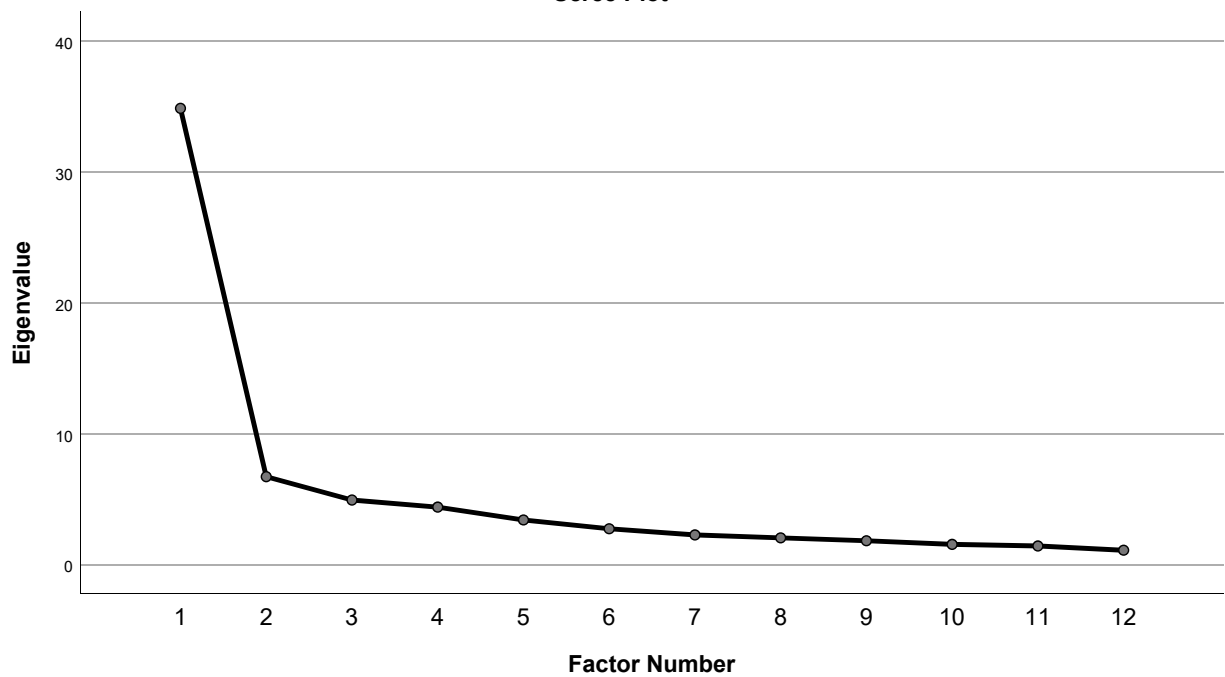
### Total Variance Explained

Factor	Extraction Sums ...	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
6				
7				
8				
9				
10				
11				
12				

Extraction Method: Principal Axis Factoring.

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

### Scree Plot





### Factor Matrix<sup>a</sup>

	Raw Factor		Rescaled Factor	
	1	2	1	2
P1	1.728	.114	.684	.045
P2	1.810	.108	.798	.048
P3	1.637	-.394	.749	-.180
E1	1.000	.071	.442	.031
E2	1.421	.435	.663	.203
R2	1.503	-.967	.599	-.385
R3	1.689	-1.351	.608	-.486
M1	1.844	.458	.792	.197
M2	1.992	.522	.785	.206
M3	1.851	.315	.742	.126
A1	1.492	.323	.728	.158
A2	1.500	.234	.680	.106

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 22 iterations required.

### Rotated Factor Matrix<sup>a</sup>

	Raw Factor		Rescaled Factor	
	1	2	1	2
P1	1.493	.878	.591	.348
P2	1.558	.929	.687	.410
P3	1.132	1.247	.518	.570
E1	.867	.504	.383	.223
E2	1.420	.439	.662	.205
R2	.700	1.645	.279	.655
R3	.637	2.067	.229	.744
M1	1.783	.659	.765	.283
M2	1.941	.689	.765	.271
M3	1.708	.780	.684	.313
A1	1.415	.572	.691	.279
A2	1.372	.650	.622	.295

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

### Factor Transformation Matrix

Factor	1	2
1	.827	.562
2	.562	-.827

Extraction Method: Principal  
Axis Factoring.

Rotation Method: Varimax with  
Kaiser Normalization.

