Factor Analysis

Notes

Output Created		14-DEC-2024 11:47:...
Comments		
Input	Data	/Users/wajdiahmed/Downloads/KMO_Low_income copy.csv
	Active Dataset	DataSet13
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	300
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES V1 V2 V3 V4 V5 V6 V7 V8 V9 V10 V11 V12 V13 V14 V15 V16 V17 V18 V19 V20 V21 V22 V23 V24 V25 V26 V27 V28 V29 V30 V31 V32 V33 V34 V35 V36 /MISSING LISTWISE /ANALYSIS V1 V2 V3 V4 V5 V6 V7 V8 V9 V10 V11 V12 V13 V14 V15 V16 V17 V18 V19 V20 V21 V22 V23 V24 V25 V26 V27 V28 V29 V30 V31 V32 V33 V34 V35 V36 /PRINT INITIAL KMO EXTRACTION ROTATION /PLOT EIGEN /CRITERIA MINEIGEN (1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE (25) /ROTATION VARIMAX /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.21
	Elapsed Time	00:00:00.00
	Maximum Memory Required	149824 (146.313K) bytes

[DataSet13]

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.828
Bartlett's Test of Sphericity	Approx. Chi-Square	10569.564
	df	630
	Sig.	.000

Communalities

	Initial	Extraction
V1	1.000	.572
V2	1.000	.850
V3	1.000	.621
V4	1.000	.806
V5	1.000	.760
V6	1.000	.783
V7	1.000	.725
V8	1.000	.695
V9	1.000	.487
V10	1.000	.836
V11	1.000	.608
V12	1.000	.734
V13	1.000	.728
V14	1.000	.518
V15	1.000	.720
V16	1.000	.598
V17	1.000	.885
V18	1.000	.581
V19	1.000	.441
V20	1.000	.706
V21	1.000	.873
V22	1.000	.907
V23	1.000	.566
V24	1.000	.639
V25	1.000	.707
V26	1.000	.520
V27	1.000	.811
V28	1.000	.497
V29	1.000	.805
V30	1.000	.667
V31	1.000	.559

Communalities

	Initial	Extraction
V32	1.000	.503
V33	1.000	.639
V34	1.000	.797
V35	1.000	.821
V36	1.000	.811

Extraction Method: Principal Component Analysis.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared.	
Component	Total	% of Variance	Cumulative %	Total	% of Variance
1	16.617	46.158	46.158	16.617	46.158
2	1.758	4.884	51.042	1.758	4.884
3	1.575	4.375	55.417	1.575	4.375
4	1.349	3.748	59.165	1.349	3.748
5	1.233	3.426	62.591	1.233	3.426
6	1.147	3.186	65.776	1.147	3.186
7	1.098	3.049	68.825	1.098	3.049
8	.985	2.737	71.562		
9	.945	2.625	74.187		
10	.857	2.382	76.569		
11	.839	2.331	78.900		
12	.828	2.300	81.199		
13	.773	2.146	83.345		
14	.685	1.903	85.248		
15	.642	1.785	87.033		
16	.575	1.596	88.629		
17	.510	1.417	90.046		
18	.457	1.268	91.314		
19	.419	1.164	92.478		
20	.383	1.065	93.543		
21	.334	.928	94.471		
22	.317	.879	95.350		
23	.254	.707	96.057		
24	.233	.649	96.705		
25	.214	.596	97.301		
26	.176	.490	97.791		
27	.153	.424	98.215		
28	.143	.396	98.612		

Total Variance Explained

Component	Extraction Sums...	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	46.158	15.592	43.312	43.312
2	51.042	2.050	5.695	49.007
3	55.417	1.524	4.232	53.239
4	59.165	1.509	4.191	57.430
5	62.591	1.427	3.963	61.392
6	65.776	1.388	3.856	65.249
7	68.825	1.288	3.577	68.825
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				

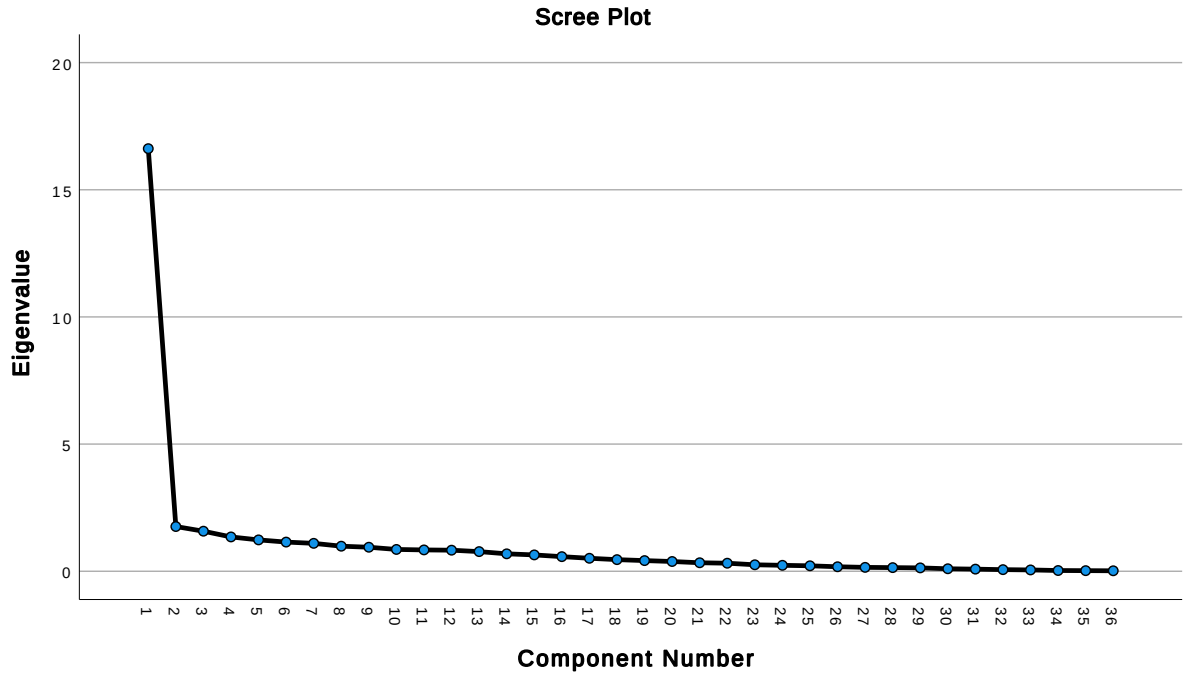
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared.	
	Total	% of Variance	Cumulative %	Total	% of Variance
29	.133	.368	98.980		
30	.098	.272	99.252		
31	.083	.231	99.483		
32	.063	.176	99.659		
33	.052	.143	99.802		
34	.029	.081	99.883		
35	.023	.065	99.948		
36	.019	.052	100.000		

Total Variance Explained

Component	Extraction Sums... Cumulative %	Rotation Sums of Squared Loadings Total	% of Variance	Cumulative %
29				
30				
31				
32				
33				
34				
35				
36				

Extraction Method: Principal Component Analysis.



Component Matrix[a]

	Component						
	1	2	3	4	5	6	7
V1	.219	-.334	.369	-.139	.104	.079	.490
V2	.918	-.031	.016	-.032	-.035	-.057	-.026
V3	.528	.202	.182	-.322	.378	-.046	.139
V4	.886	-.030	-.097	-.030	-.098	.026	-.011
V5	-.583	-.162	-.042	-.162	.011	-.540	-.270
V6	.869	-.075	-.033	.058	-.067	.107	-.050
V7	-.834	.053	.032	.022	.103	-.111	.046
V8	.210	-.577	-.239	-.011	-.280	.298	.306
V9	.146	.538	.199	.261	.192	.118	.137
V10	-.910	.062	.026	-.001	.031	-.053	-.021
V11	-.404	-.346	-.087	.462	.162	-.155	.233
V12	.031	.548	.149	-.398	-.282	-.026	.415
V13	-.212	-.047	-.605	-.351	.314	.295	-.082
V14	-.622	.006	.160	-.053	-.280	.157	-.004
V15	-.631	.016	-.310	.232	-.307	-.198	.196
V16	-.394	.152	.508	.311	-.166	.176	-.071
V17	.932	.001	.057	-.049	.006	.100	-.016
V18	-.622	.092	.029	-.103	.299	.250	-.150
V19	.004	-.459	.428	.055	.196	-.041	-.062
V20	.813	.078	.040	-.049	-.134	-.134	.007
V21	.925	-.021	-.029	.029	-.051	.065	-.089
V22	-.949	-.017	-.036	-.034	-.032	-.024	-.050
V23	-.687	.036	-.057	-.227	.075	.116	-.139
V24	.769	-.101	.104	.078	.025	.021	-.138
V25	.832	.015	-.048	-.038	.046	-.045	-.083
V26	.545	.190	-.098	.071	.324	-.213	.147
V27	.887	.073	.005	.051	.008	.120	.039
V28	-.471	-.123	.277	.202	.193	.251	-.206
V29	-.870	-.007	-.148	-.055	.011	-.076	.135
V30	.333	.373	-.362	.532	.022	.009	-.046
V31	.433	-.090	-.069	.122	.391	-.287	.328
V32	-.439	.110	-.230	.192	.100	.392	.210
V33	.752	.130	.023	.082	-.079	-.067	-.198
V34	-.849	.120	.064	-.019	-.181	-.141	.075
V35	.878	-.076	-.097	-.059	-.162	-.020	-.073
V36	.892	-.076	-.032	.024	-.061	-.063	.010

Extraction Method: Principal Component Analysis.

a. 7 components extracted.

Rotated Component Matrix[a]

	Component						
	1	2	3	4	5	6	7
V1	.137	.211	.085	.642	.237	.131	.125
V2	.891	.205	.088	.043	.003	.043	-.048
V3	.433	.329	.255	.321	-.353	-.157	.088
V4	.871	.153	.110	-.033	.099	-.029	-.012
V5	-.566	-.001	-.139	-.061	-.155	.025	-.626
V6	.872	.102	-.002	-.001	.095	.005	.064
V7	-.841	-.060	-.066	-.016	-.091	.022	-.034
V8	.230	-.049	-.068	.180	.764	-.137	.016
V9	.084	.145	.147	-.116	-.353	.193	.512
V10	-.887	-.186	-.063	-.047	-.084	.004	-.044
V11	-.458	.300	-.424	-.027	.302	.185	.055
V12	-.047	-.024	.832	.064	-.100	.103	.121
V13	-.196	.003	-.030	-.113	.075	-.819	.015
V14	-.549	-.433	.070	.050	.090	.114	.018
V15	-.647	.004	.058	-.387	.342	.153	-.094
V16	-.328	-.381	-.110	.069	-.159	.472	.284
V17	.916	.139	.091	.101	-.018	-.014	.085
V18	-.578	-.220	-.155	.078	-.247	-.286	.164
V19	.021	.008	-.394	.489	-.020	.185	-.105
V20	.780	.176	.209	-.016	-.024	.129	-.082
V21	.925	.121	.027	-.021	.023	.000	.034
V22	-.906	-.252	-.083	-.059	.003	-.046	-.100
V23	-.633	-.282	-.019	.022	-.113	-.263	-.062
V24	.777	.101	-.109	.074	-.043	.077	.004
V25	.808	.208	.051	-.012	-.065	-.045	-.037
V26	.427	.532	.077	-.064	-.188	-.032	.090
V27	.859	.177	.097	.009	.003	.011	.181
V28	-.395	-.277	-.417	.160	-.150	.055	.198
V29	-.879	-.062	.016	-.065	.096	-.096	-.073
V30	.302	.240	-.079	-.632	-.035	.075	.325
V31	.282	.679	-.054	.116	.012	.018	.037
V32	-.442	-.062	-.053	-.147	.179	-.201	.455
V33	.760	.075	.038	-.146	-.141	.113	-.027
V34	-.836	-.204	.119	-.083	-.003	.159	-.101
V35	.879	.103	.100	-.041	.114	-.011	-.111
V36	.862	.228	.058	.010	.084	.058	-.045

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 13 iterations.

Component Transformation Matrix

Component	1	2	3	4	5	6	7
1	.966	.236	.089	.033	.002	.021	.035
2	-.049	-.002	.560	-.455	-.580	.066	.370
3	.020	-.236	-.013	.643	-.380	.612	.108
4	-.004	.175	-.549	-.440	.139	.532	.414
5	-.105	.549	-.391	.272	-.479	-.419	.238
6	.115	-.535	-.083	.154	.195	-.377	.700
7	-.198	.520	.467	.294	.483	.143	.364

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Notes

Output Created		16-DEC-2024 08:10:...
Comments		
Input	Data	/Users/wajdiahmed/Downloads/PHD Dataset V01 7-12-24 - Copy of Dataset.csv
	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	165
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=Framework /HISTOGRAM NORMAL /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00

Frequencies

Notes

Output Created		16-DEC-2024 08:12:...
Comments		
Input	Data	/Users/wajdiahmed/Downloads/PHD Dataset V01 7-12-24 - Copy of Dataset.csv
	Active Dataset	DataSet15
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	165
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=Framework_A /HISTOGRAM NORMAL /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00

Warnings

Framework_A is a string so a histogram cannot be produced.

Statistics

Framework_A

N	Valid	165
	Missing	0

Framework Layers Distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	L1:	28	17.0	17.0	17.0
	L2:	65	39.4	39.4	56.4
	L3:	19	11.5	11.5	67.9
	L4:	16	9.7	9.7	77.6
	L5:	16	9.7	9.7	87.3
	L6:	21	12.7	12.7	100.0
	Total	165	100.0	100.0	