07:06 Saturday, May 4, 2024 **1** 

# The FACTOR Procedure

Input Data Type	Raw Data
Number of Records Read	25439
Number of Records Used	22929
N for Significance Tests	22929

# The FACTOR Procedure Initial Factor Method: Principal Components

Partial Correlations Controlling all other Variables						
	purchase_online_safe	buy_online	use_devices_for_deal	hear_products_email	internet_chnge_shop	
purchase_online_safe	1.00000	0.21255	0.01640	0.20348	0.27329	
buy_online	0.21255	1.00000	0.15065	0.15684	0.34363	
use_devices_for_deal	0.01640	0.15065	1.00000	0.28048	0.23677	
hear_products_email	0.20348	0.15684	0.28048	1.00000	0.02793	
internet_chnge_shop	0.27329	0.34363	0.23677	0.02793	1.00000	
environ_friendly	-0.06351	0.05451	0.03867	0.07929	-0.04790	
recycle_prods	0.05129	-0.01710	-0.03438	-0.05214	0.06364	
environ_good_business	0.03624	-0.01327	-0.02398	-0.03556	0.05845	
environ_personal_ob	0.05301	-0.04751	-0.06600	-0.04965	0.03610	
comp_help_cons_env	-0.02473	-0.00917	0.05526	0.05325	-0.02702	

Partial Correlations Controlling all other Variables					
	environ_friendly	recycle_prods	environ_good_business	environ_personal_ob	comp_help_cons_env
purchase_online_safe	-0.06351	0.05129	0.03624	0.05301	-0.02473
buy_online	0.05451	-0.01710	-0.01327	-0.04751	-0.00917
use_devices_for_deal	0.03867	-0.03438	-0.02398	-0.06600	0.05526
hear_products_email	0.07929	-0.05214	-0.03556	-0.04965	0.05325
internet_chnge_shop	-0.04790	0.06364	0.05845	0.03610	-0.02702
environ_friendly	1.00000	0.08707	0.38374	0.08317	0.22859
recycle_prods	0.08707	1.00000	0.03056	0.30274	0.09075
environ_good_business	0.38374	0.03056	1.00000	0.14621	0.35201
environ_personal_ob	0.08317	0.30274	0.14621	1.00000	0.38434
comp_help_cons_env	0.22859	0.09075	0.35201	0.38434	1.00000

Kaiser's Measure of Sampling Adequacy: Overall MSA = 0.83239405					
purchase_online_safe buy_online use_devices_for_deal hear_products_email internet_chnge_shop environ_frience					environ_friendly
0.81779787	0.80885845	0.81068374	0.80979632	0.78375079	0.85984361

Kaiser's Measure of Sampling Adequacy: Overall MSA = 0.83239405			
recycle_prods	environ_good_business	environ_personal_ob	comp_help_cons_env
0.88723542	0.84045701	0.84272039	0.83281248

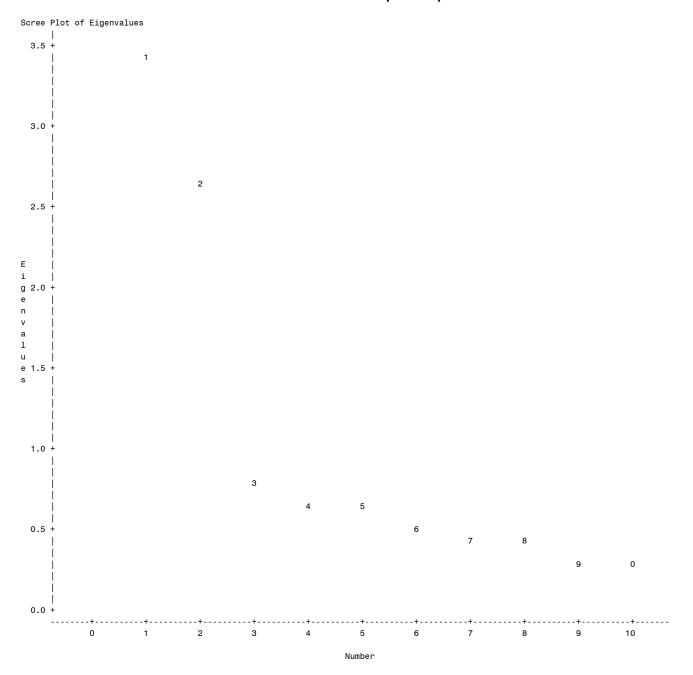
# The FACTOR Procedure Initial Factor Method: Principal Components

**Prior Communality Estimates: ONE** 

	Eigenvalues of the Correlation Matrix: Total = 10 Average = 1						
	Eigenvalue	Difference	Proportion	Cumulative			
1	3.45517407	0.78415722	0.3455	0.3455			
2	2.67101685	1.87165778	0.2671	0.6126			
3	0.79935906	0.18843607	0.0799	0.6926			
4	0.61092299	0.00170677	0.0611	0.7536			
5	0.60921622	0.12078275	0.0609	0.8146			
6	0.48843347	0.07383804	0.0488	0.8634			
7	0.41459543	0.01676978	0.0415	0.9049			
8	0.39782565	0.09741683	0.0398	0.9447			
9	0.30040882	0.04736139	0.0300	0.9747			
10	0.25304743		0.0253	1.0000			

2 factors will be retained by the NFACTOR criterion.

### The FACTOR Procedure **Initial Factor Method: Principal Components**



Factor Pattern				
	Factor1	Factor2		
purchase_online_safe	0.31510	0.65442		
buy_online	0.27438	0.74129		
use_devices_for_deal	0.24727	0.67148		
hear_products_email	0.26205	0.64603		
internet_chnge_shop	0.34809	0.70449		
environ_friendly	0.78513	-0.21973		
recycle_prods	0.65161	-0.22603		
environ_good_business	0.81797	-0.24676		

# The FACTOR Procedure Initial Factor Method: Principal Components

Factor Pattern				
Factor1 Factor				
environ_personal_ob	0.78561	-0.31219		
comp_help_cons_env	0.83806	-0.26640		

Variance Explained by Each Factor			
Factor1	Factor2		
3.4551741	2.6710168		

Final Communality Estimates: Total = 6.126191					
purchase_online_safe buy_online use_devices_for_deal hear_products_email internet_chnge_shop environ_friendly					environ_friendly
0.52755619	0.62479218	0.51203046	0.48602250	0.61747373	0.66471290

recycle_prods	environ_good_business	environ_personal_ob	comp_help_cons_env
0.47568317	0.72996849	0.71464082	0.77331048

### The FACTOR Procedure **Rotation Method: Varimax**

Orthogonal Transformation Matrix				
	1	2		
1	0.93644	0.35083		
2	-0.35083	0.93644		

Rotated Factor Pattern					
	Factor1				
purchase_online_safe	0.06548	0.72337			
buy_online	-0.00312	0.79043			
use_devices_for_deal	-0.00402	0.71555			
hear_products_email	0.01875	0.69690			
internet_chnge_shop	0.07881	0.78183			
environ_friendly	0.81232	0.06968			
recycle_prods	0.68949	0.01694			
environ_good_business	0.85255	0.05589			
environ_personal_ob	0.84520	-0.01674			
comp_help_cons_env	0.87825	0.04455			

Variance Explained by Each Factor				
Factor1 Factor				
3.3586613	2.7675296			

Final Communality Estimates: Total = 6.126191						
purchase_online_safe buy_online use_devices_for_deal hear_products_email internet_chnge_shop environ_friend						
0.52755619	0.62479218	0.51203046	0.48602250	0.61747373	0.66471290	

recycle_prods	environ_good_business	environ_personal_ob	comp_help_cons_env
0.47568317	0.72996849	0.71464082	0.77331048

# The FACTOR Procedure Rotation Method: Varimax

# **Scoring Coefficients Estimated by Regression**

Squared Multiple Correlations of the Variables with Each Factor		
Factor1	Factor2	
1.0000000	1.0000000	

Standardized Scoring Coefficients					
	Factor2				
purchase_online_safe	-0.00056	0.26143			
buy_online	-0.02300	0.28775			
use_devices_for_deal	-0.02118	0.26052			
hear_products_email	-0.01383	0.25310			
internet_chnge_shop	0.00181	0.28233			
environ_friendly	0.24165	0.00268			
recycle_prods	0.20629	-0.01308			
environ_good_business	0.25410	-0.00346			
environ_personal_ob	0.25392	-0.02969			
comp_help_cons_env	0.26213	-0.00830			

# The FASTCLUS Procedure Replace=FULL Radius=0 Maxclusters=5 Maxiter=100 Converge=0.02

	Initial Seeds						
Cluster	onlineshopper	buy_clothes_dont_need					
1	1.419208747	-1.929522479	1.000000000	1.000000000			
2	1.246361465	2.210353896	5.000000000	1.000000000			
3	-3.565773342	-1.706841487	5.000000000	1.000000000			
4	1.419208747	-1.929522479	5.000000000	5.000000000			
5	-2.859522693	2.377288541	1.000000000	1.000000000			

	Initial Seeds						
Cluster	attractive_to_others	disc_clothes_good	dress_to_please_myself				
1	1.000000000	1.000000000	1.000000000				
2	1.000000000	5.000000000	5.000000000				
3	5.000000000	5.000000000	1.000000000				
4	5.000000000	1.000000000	5.000000000				
5	5.000000000	1.000000000	5.000000000				

# Minimum Distance Between Initial Seeds =

	Iteration History						
		Relative Change in Cluster Seeds					
Iteration	Criterion	1	2	3	4	5	
1	1.6556	0.4673	0.4421	0.4795	0.4411	0.5444	
2	0.9083	0.0660	0.0569	0.0434	0.0568	0.0562	
3	0.8821	0.0509	0.0340	0.0296	0.0446	0.0303	
4	0.8689	0.0427	0.0208	0.0246	0.0306	0.0207	
5	0.8627	0.0384	0.0115	0.0188	0.0156	0.0151	
6	0.8594	0.0400	0.0105	0.0167	0.00521	0.0109	
7	0.8558	0.0512	0.0154	0.0202	0.00210	0.00912	
8	0.8498	0.0522	0.0146	0.0250	0.00187	0.0121	
9	0.8439	0.0354	0.00805	0.0236	0.00364	0.0143	
10	0.8404	0.0269	0.00883	0.0234	0.00428	0.0117	
11	0.8377	0.0185	0.00990	0.0242	0.00424	0.00867	
12	0.8357	0.0112	0.0105	0.0240	0.00382	0.00712	
13	0.8340	0.00585	0.0126	0.0262	0.00280	0.00774	
14	0.8323	0.00410	0.0125	0.0251	0.00197	0.00725	
15	0.8306	0.00259	0.0124	0.0232	0.00154	0.00801	
16	0.8293	0.00110	0.00995	0.0205	0.00115	0.00802	
17	0.8283	0.00153	0.00761	0.0161	0.00181	0.00843	

### The FASTCLUS Procedure Replace=FULL Radius=0 Maxclusters=5 Maxiter=100 Converge=0.02

Convergence criterion is satisfied.

Criterion Based on Final Seeds = 0.8277
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	Cluster Summary							
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids		
1	4841	0.8217	5.1786		2	2.3019		
2	5091	0.7230	4.9698		3	2.1963		
3	3909	0.8766	6.2528		2	2.1963		
4	6709	0.8319	5.3655		2	2.6677		
5	4458	0.9013	5.8031		1	2.6870		

# 431 Observation(s) were omitted due to missing values.

Statistics for Variables						
Variable	Total STD	Within STD	R-Square	RSQ/(1-RSQ)		
onlineshopper	1.00000	0.89548	0.198254	0.247278		
environconscious	1.00000	0.96550	0.067965	0.072921		
clothes_last_long_time	0.89256	0.75464	0.285278	0.399146		
buy_clothes_dont_need	1.30910	0.73991	0.680594	2.130812		
attractive_to_others	1.07783	0.79974	0.449536	0.816651		
disc_clothes_good	1.15034	0.80563	0.509605	1.039174		
dress_to_please_myself	0.97247	0.82025	0.288686	0.405849		
OVER-ALL	1.06558	0.82760	0.396900	0.658100		

Pseudo F Statistic = 4113.62

Approximate Expected Over-All R-Squared = 0.36786

> Cubic Clustering Criterion = 34.811

WARNING: The two values above are invalid for correlated variables.

# The FASTCLUS Procedure Replace=FULL Radius=0 Maxclusters=5 Maxiter=100 Converge=0.02

	Cluster Means								
Cluster	onlineshopper	buy_clothes_dont_need							
1	0.337482050	-0.253188904	4.572244553	1.586900685					
2	0.389611742	-0.024204402	4.692461909	1.385046729					
3	-0.454034760	-0.389484760	4.554210526	1.405773857					
4	0.223226695	0.303710022	4.463879496	3.959741856					
5	-0.746473325	0.198675940	3.329365079	2.720760921					

Cluster Means								
Cluster	attractive_to_others disc_clothes_good dress_to_please_my							
1	4.048095339	2.196428571	4.405877342					
2	4.275297009	4.460958206	4.498676441					
3	2.313595327	4.159501062	4.357559682					
4	4.289745567	3.914622788	4.537256107					
5	3.229014813	2.997654784	3.102906704					

	Cluster Standard Deviations								
Cluster	er onlineshopper environconscious clothes_last_long_time buy_clothes_dont								
1	0.833628392	0.995879911	0.688008418	0.775993686					
2	0.834932606	1.038819989	0.603152697	0.524854494					
3	1.039517867	0.992075469	0.728979828	0.706356791					
4	0.882313537	0.982285736	0.755813918	0.722155088					
5	0.909593209	0.776870650	0.972691070	0.936682897					

	Cluster Standard Deviations								
Cluster	attractive_to_others disc_clothes_good dress_to_please_my								
1	0.847846853	0.762241510	0.814981890						
2	0.638195703	0.500972443	0.765304327						
3	0.875313477	0.806981065	0.930884194						
4	0.790966120	0.976119339	0.655248701						
5	0.853157983	0.849166023	0.991384216						

# The MEANS Procedure

### CLUSTER=.

Variable	N	Mean	Std Dev	Minimum	Maximum
nike	431	0.1508121	0.3582815	0	1.0000000
new_balance	431	0.0464037	0.2106023	0	1.0000000
gend_resp	269	0.4498141	0.4984023	0	1.0000000
white	431	0.6264501	0.4843084	0	1.0000000
instagram	431	0.0348028	0.1834930	0	1.0000000
amazon	431	0.0742459	0.2624754	0	1.0000000
full_employed	374	0.3609626	0.4809231	0	1.0000000
age18to34	431	0.1461717	0.3536888	0	1.0000000
marriage_status	431	0.5150812	0.5003533	0	1.0000000
college_grad	431	0.1508121	0.3582815	0	1.0000000
onlinepurchase	431	0.0394432	0.1948730	0	1.0000000
alcohol	431	0.1972158	0.3983590	0	1.0000000
credit20xlast30	431	0.0371230	0.1892828	0	1.0000000
restaurants	431	0.5266821	0.4998678	0	1.0000000

### CLUSTER=1

Variable	N	Mean	Std Dev	Minimum	Maximum
nike	4841	0.1600909	0.3667282	0	1.0000000
new_balance	4841	0.1204297	0.3254969	0	1.0000000
gend_resp	3080	0.3331169	0.4714045	0	1.0000000
white	4841	0.8266887	0.3785553	0	1.0000000
instagram	4841	0.0543276	0.2266864	0	1.0000000
amazon	4841	0.3288577	0.4698467	0	1.0000000
full_employed	4246	0.4879887	0.4999146	0	1.0000000
age18to34	4841	0.1888040	0.3913932	0	1.0000000
marriage_status	4841	0.6401570	0.4800038	0	1.0000000
college_grad	4841	0.3827722	0.4861136	0	1.0000000
onlinepurchase	4841	0.2111134	0.4081408	0	1.0000000
alcohol	4841	0.5608345	0.4963366	0	1.0000000
credit20xlast30	4841	0.1328238	0.3394193	0	1.0000000
restaurants	4841	0.8717207	0.3344351	0	1.0000000

### CLUSTER=2

Variable	N	Mean	Std Dev	Minimum	Maximum
nike	5091	0.1958358	0.3968817	0	1.0000000
new_balance	5091	0.1043017	0.3056816	0	1.0000000
gend_resp	3399	0.3665784	0.4819409	0	1.0000000
white	5091	0.7760754	0.4169131	0	1.0000000
instagram	5091	0.0840699	0.2775199	0	1.0000000
amazon	5091	0.3301905	0.4703278	0	1.0000000
full_employed	4463	0.5180372	0.4997305	0	1.0000000
age18to34	5091	0.1909252	0.3930688	0	1.0000000
marriage_status	5091	0.5945787	0.4910216	0	1.0000000
college_grad	5091	0.3474759	0.4762152	0	1.0000000
onlinepurchase	5091	0.2107641	0.4078912	0	1.0000000
alcohol	5091	0.5462581	0.4979045	0	1.0000000
credit20xlast30	5091	0.1162836	0.3205962	0	1.0000000
restaurants	5091	0.8695738	0.3368049	0	1.0000000

# The MEANS Procedure

### CLUSTER=3

Variable	N	Mean	Std Dev	Minimum	Maximum
nike	3909	0.1808647	0.3849553	0	1.0000000
new_balance	3909	0.0867229	0.2814646	0	1.0000000
gend_resp	2281	0.3985094	0.4896987	0	1.0000000
white	3909	0.7490407	0.4336206	0	1.0000000
instagram	3909	0.0613968	0.2400874	0	1.0000000
amazon	3909	0.2409823	0.4277343	0	1.0000000
full_employed	3519	0.5336743	0.4989356	0	1.0000000
age18to34	3909	0.2018419	0.4014262	0	1.0000000
marriage_status	3909	0.6211307	0.4851676	0	1.0000000
college_grad	3909	0.2409823	0.4277343	0	1.0000000
onlinepurchase	3909	0.1483755	0.3555173	0	1.0000000
alcohol	3909	0.4655922	0.4988785	0	1.0000000
credit20xlast30	3909	0.0775134	0.2674386	0	1.0000000
restaurants	3909	0.8135073	0.3895536	0	1.0000000

### CLUSTER=4

Variable	N	Mean	Std Dev	Minimum	Maximum
nike	6709	0.2665077	0.4421657	0	1.0000000
new_balance	6709	0.1181994	0.3228682	0	1.0000000
gend_resp	5239	0.2931857	0.4552663	0	1.0000000
white	6709	0.7287226	0.4446520	0	1.0000000
instagram	6709	0.1310180	0.3374452	0	1.0000000
amazon	6709	0.3478909	0.4763367	0	1.0000000
full_employed	5803	0.5242116	0.4994565	0	1.0000000
age18to34	6709	0.1685795	0.3744080	0	1.0000000
marriage_status	6709	0.5485169	0.4976776	0	1.0000000
college_grad	6709	0.3280668	0.4695443	0	1.0000000
onlinepurchase	6709	0.2696378	0.4438047	0	1.0000000
alcohol	6709	0.5404680	0.4983968	0	1.0000000
credit20xlast30	6709	0.1234163	0.3289390	0	1.0000000
restaurants	6709	0.8740498	0.3318180	0	1.0000000

### CLUSTER=5

Variable	N	Mean	Std Dev	Minimum	Maximum
nike	4458	0.2413638	0.4279584	0	1.0000000
new balance	4458	0.0805294	0.2721415	0	1.0000000
gend_resp	2696	0.4224777	0.4940454	0	1.0000000
white	4458	0.6913414	0.4619917	0	1.0000000
instagram	4458	0.0908479	0.2874249	0	1.0000000
amazon	4458	0.2451772	0.4302405	0	1.0000000
full_employed	3860	0.5917098	0.4915810	0	1.0000000
age18to34	4458	0.1924630	0.3942789	0	1.0000000
marriage_status	4458	0.5473306	0.4978106	0	1.0000000
college_grad	4458	0.2694033	0.4436996	0	1.0000000
onlinepurchase	4458	0.1756393	0.3805557	0	1.0000000
alcohol	4458	0.4138627	0.4925797	0	1.0000000
credit20xlast30	4458	0.0971288	0.2961662	0	1.0000000
restaurants	4458	0.7658143	0.4235363	0	1.0000000