

**The FACTOR Procedure**

<b>Input Data Type</b>	Raw Data
<b>Number of Records Read</b>	25439
<b>Number of Records Used</b>	13168
<b>N for Significance Tests</b>	13168

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

Partial Correlations Controlling all other Variables					
	purchase_online_safe	buy_online	more_shopping_internet	internet_chnge_shop	buy_friend_rec_prod
purchase_online_safe	1.00000	0.11429	0.21644	0.14206	-0.00982
buy_online	0.11429	1.00000	0.42655	0.09909	0.00007
more_shopping_internet	0.21644	0.42655	1.00000	0.44111	0.03784
internet_chnge_shop	0.14206	0.09909	0.44111	1.00000	0.08935
buy_friend_rec_prod	-0.00982	0.00007	0.03784	0.08935	1.00000
follow_fav_brand	-0.01587	0.02270	0.00887	0.02335	0.10182
buy_ad_prod_on_social	0.00770	0.04492	-0.00934	0.00133	0.33760
tell_ppl_prod_social_ob	-0.00919	0.01464	-0.02409	-0.00118	0.13334
trust_prod_info	0.05272	0.03790	-0.02134	-0.02308	0.24497

Partial Correlations Controlling all other Variables				
	follow_fav_brand	buy_ad_prod_on_social	tell_ppl_prod_social_ob	trust_prod_info
purchase_online_safe	-0.01587	0.00770	-0.00919	0.05272
buy_online	0.02270	0.04492	0.01464	0.03790
more_shopping_internet	0.00887	-0.00934	-0.02409	-0.02134
internet_chnge_shop	0.02335	0.00133	-0.00118	-0.02308
buy_friend_rec_prod	0.10182	0.33760	0.13334	0.24497
follow_fav_brand	1.00000	0.18275	0.38887	0.08795
buy_ad_prod_on_social	0.18275	1.00000	0.11134	0.25828
tell_ppl_prod_social_ob	0.38887	0.11134	1.00000	0.12732
trust_prod_info	0.08795	0.25828	0.12732	1.00000

Kaiser's Measure of Sampling Adequacy: Overall MSA = 0.81755216				
purchase_online_safe	buy_online	more_shopping_internet	internet_chnge_shop	buy_friend_rec_prod
0.87460581	0.80906103	0.72014184	0.79508900	0.84646949

Kaiser's Measure of Sampling Adequacy: Overall MSA = 0.81755216			
follow_fav_brand	buy_ad_prod_on_social	tell_ppl_prod_social_ob	trust_prod_info
0.82961347	0.83719310	0.82676229	0.86372389

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

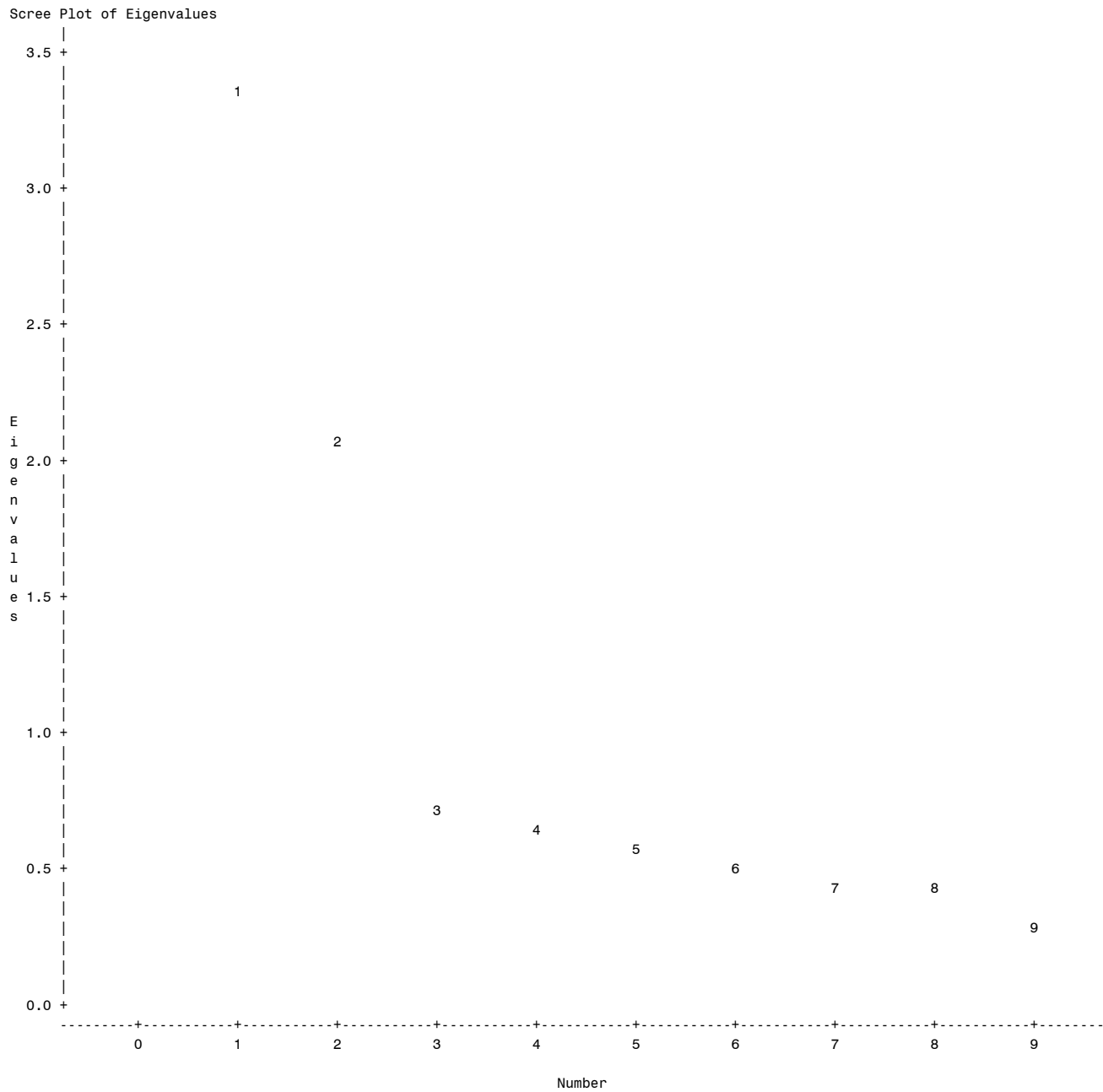
**Prior Communality Estimates: ONE**

Eigenvalues of the Correlation Matrix: Total = 9 Average = 1				
	Eigenvalue	Difference	Proportion	Cumulative
<b>1</b>	3.38872179	1.29834097	0.3765	0.3765
<b>2</b>	2.09038082	1.38391168	0.2323	0.6088
<b>3</b>	0.70646914	0.05575279	0.0785	0.6873
<b>4</b>	0.65071635	0.10787489	0.0723	0.7596
<b>5</b>	0.54284146	0.06889732	0.0603	0.8199
<b>6</b>	0.47394414	0.03513596	0.0527	0.8726
<b>7</b>	0.43880818	0.04487352	0.0488	0.9213
<b>8</b>	0.39393466	0.07975119	0.0438	0.9651
<b>9</b>	0.31418347		0.0349	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	0.43115	0.54147
buy_online	0.55222	0.55748
more_shopping_internet	0.56033	0.67400
internet_chnge_shop	0.54386	0.58849
buy_friend_rec_prod	0.72472	-0.30656
follow_fav_brand	0.65409	-0.38098
buy_ad_prod_on_social	0.71206	-0.37283

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

Factor Pattern		
	Factor1	Factor2
tell_ppl_prod_social_ob	0.62714	-0.42098
trust_prod_info	0.65937	-0.36120

Variance Explained by Each Factor	
Factor1	Factor2
3.3887218	2.0903808

Final Communality Estimates: Total = 5.479103				
purchase_online_safe	buy_online	more_shopping_internet	internet_chnge_shop	buy_friend_rec_prod
0.47907753	0.61572340	0.76824347	0.64210207	0.61919198

follow_fav_brand	buy_ad_prod_on_social	tell_ppl_prod_social_ob	trust_prod_info
0.57297582	0.64603127	0.57052342	0.56523365

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

Orthogonal Transformation Matrix		
	1	2
1	0.81809	0.57510
2	-0.57510	0.81809

Rotated Factor Pattern		
	Factor1	Factor2
<b>purchase_online_safe</b>	0.04133	0.69092
<b>buy_online</b>	0.13116	0.77364
<b>more_shopping_internet</b>	0.07078	0.87363
<b>internet_chnge_shop</b>	0.10649	0.79421
<b>buy_friend_rec_prod</b>	0.76918	0.16599
<b>follow_fav_brand</b>	0.75420	0.06448
<b>buy_ad_prod_on_social</b>	0.79694	0.10449
<b>tell_ppl_prod_social_ob</b>	0.75515	0.01627
<b>trust_prod_info</b>	0.74715	0.08371

Variance Explained by Each Factor	
Factor1	Factor2
2.9593157	2.5197869

Final Communality Estimates: Total = 5.479103				
<b>purchase_online_safe</b>	<b>buy_online</b>	<b>more_shopping_internet</b>	<b>internet_chnge_shop</b>	<b>buy_friend_rec_prod</b>
0.47907753	0.61572340	0.76824347	0.64210207	0.61919198

<b>follow_fav_brand</b>	<b>buy_ad_prod_on_social</b>	<b>tell_ppl_prod_social_ob</b>	<b>trust_prod_info</b>
0.57297582	0.64603127	0.57052342	0.56523365

**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		
	Factor1	Factor2
purchase_online_safe	-0.04488	0.28508
buy_online	-0.02006	0.31189
more_shopping_internet	-0.05016	0.35887
internet_chnge_shop	-0.03061	0.32261
buy_friend_rec_prod	0.25930	0.00302
follow_fav_brand	0.26272	-0.03810
buy_ad_prod_on_social	0.27447	-0.02507
tell_ppl_prod_social_ob	0.26722	-0.05832
trust_prod_info	0.25855	-0.02946

## The HPCLUS Procedure

Performance Information	
Execution Mode	Single-Machine
Number of Threads	4

Data Access Information			
Data	Engine	Role	Path
WORK.MYSCORES1	V9	Input	On Client
WORK.MYCLUSTER	V9	Output	On Client

Model Information	
Maximum Iteration	100
Stop Criterion	Cluster Change
Stop Criterion Value	0
Clusters	3
Seed Initialization	12345
Distance	Euclidean
Number of Cluster Estimation	ABC

Number of Observations Read	25439
Number of Observations Used	12536



### The HPCLUS Procedure

ABC Parameters			
Minimum Cluster	Maximum Cluster	Reference Distribution Count	Alignment Method
2	6	20	PCA

ABC Statistics					
Number of Clusters	Logarithm of Within-Cluster SSE		Gap	Simulation Adjusted Standard Deviation	One Standard Error Adjusted Gap
	Input	Reference			
2	11.3239	12.5713	1.2473	0.00323	1.2441
3	11.1440	12.4269	1.2828	0.00586	1.2770
4	11.0571	12.2692	1.2121	0.00605	1.2060
5	10.9862	12.2457	1.2594	0.00500	1.2544
6	10.9323	12.0687	1.1364	0.00403	1.1324

Estimated Number of Clusters	
Criterion	Number of Clusters
FIRSTPEAK	3

Cluster Summary								
Cluster	Frequency	Distance from Cluster Centroid to Observation			SSE	Standard Deviation	Nearest Cluster	Distance to Nearest Cluster Centroid
		Maximum	Minimum	Average				
1	4356	5.2818	0.9244	2.1793	22800.9	2.2879	3	2.1480
2	4858	6.2239	0.4669	2.2612	27021.6	2.3585	1	2.6053
3	3322	6.9898	0.6713	2.2997	19327.5	2.4121	1	2.1480

**The HPCLUS Procedure**

<b>Iteration Statistics</b>	
<b>Iteration Number</b>	<b>SSE</b>
0	114035
1	78651
2	77181
3	76629
4	76336
5	76036
6	75393
7	73595
8	70869
9	69554
10	69273
11	69206
12	69174
13	69158
14	69154
15	69152
16	69151
17	69150
18	69150
19	69150
20	69150
21	69150
22	69150
23	69150
24	69150
25	69150
26	69150
27	69150
28	69150
29	69150

### The HPCLUS Procedure

Descriptive Statistics		
Variable	Mean	Standard Deviation
onlineshopper	0.000401	0.998514
socialmedia	0.008603	0.994402
clothes_last_long_time	4.354419	0.857279
buy_clothes_dont_need	2.414726	1.298302
attractive_to_others	3.785019	1.030822
disc_clothes_good	3.606094	1.126640
dress_to_please_myself	4.233807	0.916355

Within Cluster Statistics			
Variable	Cluster	Mean	Standard Deviation
onlineshopper	1	-0.1678	2.3677
	2	0.3852	2.0476
	3	-0.3418	1.9022
socialmedia	1	-0.0106	2.5068
	2	0.0569	2.0242
	3	-0.0368	1.9793
clothes_last_long_time	1	4.5939	9.9976
	2	4.1546	8.0708
	3	4.3326	7.6079
buy_clothes_dont_need	1	1.4350	4.4831
	2	3.7919	5.3600
	3	1.6854	3.2324
attractive_to_others	1	3.5682	8.2715
	2	4.0311	7.2005
	3	3.7095	6.6804
disc_clothes_good	1	4.4373	9.5502
	2	3.7238	6.7450
	3	2.3441	4.3317
dress_to_please_myself	1	4.3225	9.7043
	2	4.2468	7.8762
	3	4.0984	7.0813

**The FASTCLUS Procedure**  
**Replace=FULL Radius=0 Maxclusters=6 Maxiter=100 Converge=0.02**

Initial Seeds						
Cluster	onlineshopper	socialmedia	clothes_last_long_time	buy_clothes_dont_need	attractive_to_others	dress_to_please_myself
1	2.094919891	-1.527760853	1.000000000	1.000000000	1.000000000	5.000000000
2	-1.777554842	1.644244124	5.000000000	1.000000000	2.000000000	5.000000000
3	1.712306102	1.231641472	2.000000000	1.000000000	5.000000000	1.000000000
4	2.633910617	0.905084847	5.000000000	5.000000000	5.000000000	5.000000000
5	-1.341882259	-2.232690196	5.000000000	4.000000000	5.000000000	1.000000000
6	0.175097951	-0.308777041	1.000000000	5.000000000	1.000000000	1.000000000

Minimum Distance Between Initial Seeds = 6.096855

Iteration History							
Iteration	Criterion	Relative Change in Cluster Seeds					
		1	2	3	4	5	6
1	1.3381	0.4469	0.4298	0.4711	0.4274	0.4706	0.5678
2	0.8094	0.0958	0.0670	0.1055	0.0440	0.0597	0.0656
3	0.7801	0.0712	0.0275	0.0741	0.0191	0.0467	0.0324
4	0.7671	0.0983	0.0335	0.0480	0.0133	0.0306	0.0219
5	0.7513	0.0807	0.0310	0.0194	0.0127	0.0290	0.0212
6	0.7420	0.0416	0.0131	0.00831	0.0110	0.0265	0.0199
7	0.7391	0.0219	0.00752	0.00804	0.0142	0.0270	0.0111
8	0.7370	0.0392	0.0227	0.00643	0.00783	0.0158	0.00586
9	0.7341	0.0153	0.00983	0.00509	0.00638	0.0128	0.00415

Convergence criterion is satisfied.

Criterion Based on Final Seeds = 0.7334

Cluster Summary						
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids
1	4191	0.7661	3.9859		2	2.2028
2	6753	0.6801	4.3387		1	2.2028
3	2320	0.8487	4.9421		2	2.4976
4	4986	0.7484	4.9361		5	2.2324
5	3133	0.7418	4.3199		4	2.2324
6	3335	0.8443	5.6142		3	2.5520

**The FASTCLUS Procedure**  
**Replace=FULL Radius=0 Maxclusters=6 Maxiter=100 Converge=0.02**

**721 Observation(s) were omitted due to missing values.**

Statistics for Variables				
Variable	Total STD	Within STD	R-Square	RSQ/(1-RSQ)
onlineshopper	1.00000	0.94132	0.114246	0.128981
socialmedia	1.00000	0.79612	0.366439	0.578379
clothes_last_long_time	0.89256	0.66298	0.448376	0.812829
buy_clothes_dont_need	1.30910	0.67221	0.736380	2.793336
attractive_to_others	1.07783	0.76780	0.492647	0.971015
dress_to_please_myself	0.97247	0.65282	0.549446	1.219488
OVER-ALL	1.05839	0.73307	0.520385	1.085007

Pseudo F Statistic =	5362.54
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Approximate Expected Over-All R-Squared =	0.46107
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Cubic Clustering Criterion =	73.198
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**WARNING: The two values above are invalid for correlated variables.**

Cluster Means						
Cluster	onlineshopper	socialmedia	clothes_last_long_time	buy_clothes_dont_need	attractive_to_others	dress_to_please_myself
1	-0.383361006	-0.408365007	4.541707317	1.310523715	2.355013550	4.638814671
2	-0.222490895	0.506764002	4.679491018	1.378208084	4.346358522	4.626551620
3	-0.223631333	0.105178613	4.491896627	1.568060498	3.510600707	2.322879859
4	0.480897949	0.473370775	4.493153485	4.168328923	4.332581967	4.538682536
5	-0.146687851	-1.247258202	4.619063110	2.909692359	4.166503428	4.499177361
6	0.388281200	-0.108192391	2.843053435	2.956682028	3.134176434	3.464801721

Cluster Standard Deviations						
Cluster	onlineshopper	socialmedia	clothes_last_long_time	buy_clothes_dont_need	attractive_to_others	dress_to_please_myself
1	0.890341910	0.980310537	0.681521347	0.571256075	0.824618955	0.545303612
2	1.002898803	0.783507636	0.566414172	0.517779480	0.569793588	0.491518195
3	0.918517236	0.895257997	0.691946944	0.768073073	0.964629795	0.823048133
4	0.989052895	0.713074556	0.671980488	0.641245223	0.767127914	0.650084992
5	0.907754325	0.689213635	0.575258089	0.810329168	0.774150311	0.644965295
6	0.823841276	0.753368403	0.840943972	0.866804346	0.876276035	0.896765370

## The MEANS Procedure

Cluster=.

Variable	N	Mean	Std Dev	Minimum	Maximum
age55plus	721	0.5367545	0.4989934	0	1.0000000
male	721	0.6671290	0.4715679	0	1.0000000
adidas	721	0.1151179	0.3193857	0	1.0000000
nike	721	0.1608877	0.3676824	0	1.0000000
new_balance	721	0.0485437	0.2150613	0	1.0000000
amazon	721	0.0443828	0.2060871	0	1.0000000
facebook	721	0.2177531	0.4130052	0	1.0000000
twitter	721	0.0319001	0.1758562	0	1.0000000
instagram	721	0.0319001	0.1758562	0	1.0000000
purch_footwear	721	0.5755895	0.4945963	0	1.0000000
status_strivers	721	0.1331484	0.3399709	0	1.0000000
image_shapers	721	0.3439667	0.4753599	0	1.0000000

Cluster=1

Variable	N	Mean	Std Dev	Minimum	Maximum
age55plus	4191	0.4590790	0.4983821	0	1.0000000
male	4191	0.6354092	0.4813727	0	1.0000000
adidas	4191	0.0660940	0.2484760	0	1.0000000
nike	4191	0.1648771	0.3711139	0	1.0000000
new_balance	4191	0.0880458	0.2833953	0	1.0000000
amazon	4191	0.1989979	0.3992941	0	1.0000000
facebook	4191	0.4418993	0.4966721	0	1.0000000
twitter	4191	0.0510618	0.2201501	0	1.0000000
instagram	4191	0.0513004	0.2206361	0	1.0000000
purch_footwear	4191	0.7198759	0.4491132	0	1.0000000
status_strivers	4191	0.0930565	0.2905463	0	1.0000000
image_shapers	4191	0.1593892	0.3660823	0	1.0000000

Cluster=2

Variable	N	Mean	Std Dev	Minimum	Maximum
age55plus	6753	0.5006664	0.5000366	0	1.0000000
male	6753	0.5853695	0.4926946	0	1.0000000
adidas	6753	0.0735969	0.2611331	0	1.0000000
nike	6753	0.1834740	0.3870833	0	1.0000000
new_balance	6753	0.1137272	0.3175032	0	1.0000000
amazon	6753	0.3220791	0.4673077	0	1.0000000
facebook	6753	0.4956316	0.5000179	0	1.0000000
twitter	6753	0.0765586	0.2659094	0	1.0000000
instagram	6753	0.0820376	0.2744423	0	1.0000000
purch_footwear	6753	0.7772842	0.4160999	0	1.0000000
status_strivers	6753	0.1334222	0.3400556	0	1.0000000
image_shapers	6753	0.1230564	0.3285263	0	1.0000000

Cluster=3

Variable	N	Mean	Std Dev	Minimum	Maximum
age55plus	2320	0.3883621	0.4874827	0	1.0000000
male	2320	0.6844828	0.4648217	0	1.0000000
adidas	2320	0.0862069	0.2807298	0	1.0000000
nike	2320	0.1793103	0.3836947	0	1.0000000
new_balance	2320	0.0987069	0.2983324	0	1.0000000
amazon	2320	0.2633621	0.4405521	0	1.0000000
facebook	2320	0.4672414	0.4990333	0	1.0000000
twitter	2320	0.0620690	0.2413328	0	1.0000000
instagram	2320	0.0650862	0.2467311	0	1.0000000
purch_footwear	2320	0.7189655	0.4496012	0	1.0000000
status_strivers	2320	0.1038793	0.3051697	0	1.0000000
image_shapers	2320	0.2771552	0.4476903	0	1.0000000

## The MEANS Procedure

Cluster=4

Variable	N	Mean	Std Dev	Minimum	Maximum
age55plus	4986	0.3975130	0.4894328	0	1.0000000
male	4986	0.4402327	0.4964648	0	1.0000000
adidas	4986	0.1255515	0.3313765	0	1.0000000
nike	4986	0.2862014	0.4520300	0	1.0000000
new_balance	4986	0.1167268	0.3211267	0	1.0000000
amazon	4986	0.3275170	0.4693547	0	1.0000000
facebook	4986	0.5659848	0.4956766	0	1.0000000
twitter	4986	0.1191336	0.3239781	0	1.0000000
instagram	4986	0.1468111	0.3539530	0	1.0000000
purch_footwear	4986	0.8602086	0.3468053	0	1.0000000
status_strivers	4986	0.2527076	0.4346083	0	1.0000000
image_shapers	4986	0.3052547	0.4605614	0	1.0000000

Cluster=5

Variable	N	Mean	Std Dev	Minimum	Maximum
age55plus	3133	0.5205873	0.4996557	0	1.0000000
male	3133	0.4810086	0.4997190	0	1.0000000
adidas	3133	0.0903288	0.2866979	0	1.0000000
nike	3133	0.2144909	0.4105342	0	1.0000000
new_balance	3133	0.1139483	0.3177992	0	1.0000000
amazon	3133	0.1468241	0.3539870	0	1.0000000
facebook	3133	0.5129269	0.4999127	0	1.0000000
twitter	3133	0.0536227	0.2253076	0	1.0000000
instagram	3133	0.0631982	0.2433580	0	1.0000000
purch_footwear	3133	0.8132780	0.3897504	0	1.0000000
status_strivers	3133	0.2502394	0.4332200	0	1.0000000
image_shapers	3133	0.2480051	0.4319237	0	1.0000000

Cluster=6

Variable	N	Mean	Std Dev	Minimum	Maximum
age55plus	3335	0.2851574	0.4515571	0	1.0000000
male	3335	0.6191904	0.4856587	0	1.0000000
adidas	3335	0.1124438	0.3159590	0	1.0000000
nike	3335	0.2539730	0.4353476	0	1.0000000
new_balance	3335	0.0854573	0.2796029	0	1.0000000
amazon	3335	0.1838081	0.3873857	0	1.0000000
facebook	3335	0.4743628	0.4994172	0	1.0000000
twitter	3335	0.0896552	0.2857299	0	1.0000000
instagram	3335	0.1070465	0.3092187	0	1.0000000
purch_footwear	3335	0.7049475	0.4561347	0	1.0000000
status_strivers	3335	0.1871064	0.3900554	0	1.0000000
image_shapers	3335	0.5745127	0.4944908	0	1.0000000