

Badji Mokhtar University, Annaba
Faculty of Economic, Commercial and Management Sciences
Department of Financial and Accounting Science.
Make-up Midterm Exam Data Analysis

Exercise:

The following table contains data on **ten (10) products**, including the product's price and an assessment of its quality based on certain specifications such as: packaging quality, product size, availability in the market, and display method (product image).

The marketing manager wants to distribute these products in the market according to their price and specifications, so he used the SPSS and get the following results.

	products	price	taste	size	savings	packaging	photo
1	1.00	4.40	8.18	6.32	9.37	8.32	9.20
2	2.00	4.32	7.12	5.90	8.68	7.18	8.20
3	3.00	6.11	5.33	5.12	6.79	5.84	5.63
4	4.00	4.62	7.07	5.93	6.70	7.78	7.97
5	5.00	5.00	6.72	6.38	6.14	6.73	7.38
6	6.00	7.28	5.08	5.18	8.67	5.02	5.80
7	7.00	8.32	2.83	3.13	7.88	2.83	3.65
8	8.00	7.93	3.42	4.00	7.63	3.64	4.15
9	9.00	4.28	4.34	3.73	5.29	7.30	6.39
10	10.00	7.59	2.38	2.81	4.43	2.38	2.76

FACTOR

/VARIABLES price taste size savings packaging photo

/MISSING LISTWISE

/ANALYSIS price taste size savings packaging photo

/PRINT UNIVARIATE INITIAL CORRELATION SIG DET KMO INV REPR EXTRACTION ROTATION

FSCORE

/FORMAT SORT BLANK(.30)

/PLOT EIGEN ROTATION

/CRITERIA MINEIGEN(1) ITERATE(25)

/EXTRACTION PC

/CRITERIA ITERATE(25)

/ROTATION VARIMAX

/SAVE REG(ALL)

/METHOD=CORRELATION.

[DataSet0]

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
price of productes	5.9850	1.65089	10
taste of productes	5.2470	1.99612	10
size of productes	4.8500	1.33539	10
savings of productes	7.1580	1.58298	10
packaging of productes	5.7020	2.13404	10
photo of productes	6.1130	2.12156	10

Correlation Matrix^a

		price of productes	taste of productes	size of productes
Correlation	price of productes	1.000	-.815-	-.687-
	taste of productes	-.815-	1.000	.960
	size of productes	-.687-	.960	1.000
	savings of productes	-.046-	.479	.484
	packaging of productes	-.949-	.904	.807
	photo of productes	-.890-	.974	.897
Sig. (1-tailed)	price of productes		.002	.014
	taste of productes	.002		.000
	size of productes	.014	.000	
	savings of productes	.449	.081	.078
	packaging of productes	.000	.000	.002
	photo of productes	.000	.000	.000

Correlation Matrix^a

		savings of productes	packaging of productes	photo of productes
Correlation	price of productes	-.046-	-.949-	-.890-
	taste of productes	.479	.904	.974
	size of productes	.484	.807	.897
	savings of productes	1.000	.263	.446
	packaging of productes	.263	1.000	.961
	photo of productes	.446	.961	1.000
Sig. (1-tailed)	price of productes	.449	.000	.000
	taste of productes	.081	.000	.000
	size of productes	.078	.002	.000
	savings of productes		.232	.098
	packaging of productes	.232		.000
	photo of productes	.098	.000	

a. Determinant = 1.350E-6

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.720
Bartlett's Test of Sphericity Approx. Chi-Square	83.344
df	15
Sig.	.000

Communalities

	Initial	Extraction
price of productes	1.000	.961
taste of productes	1.000	.977
size of productes	1.000	.881
savings of productes	1.000	.962
packaging of productes	1.000	.963
photo of productes	1.000	.992

Extraction Method: Principal Component Analysis.

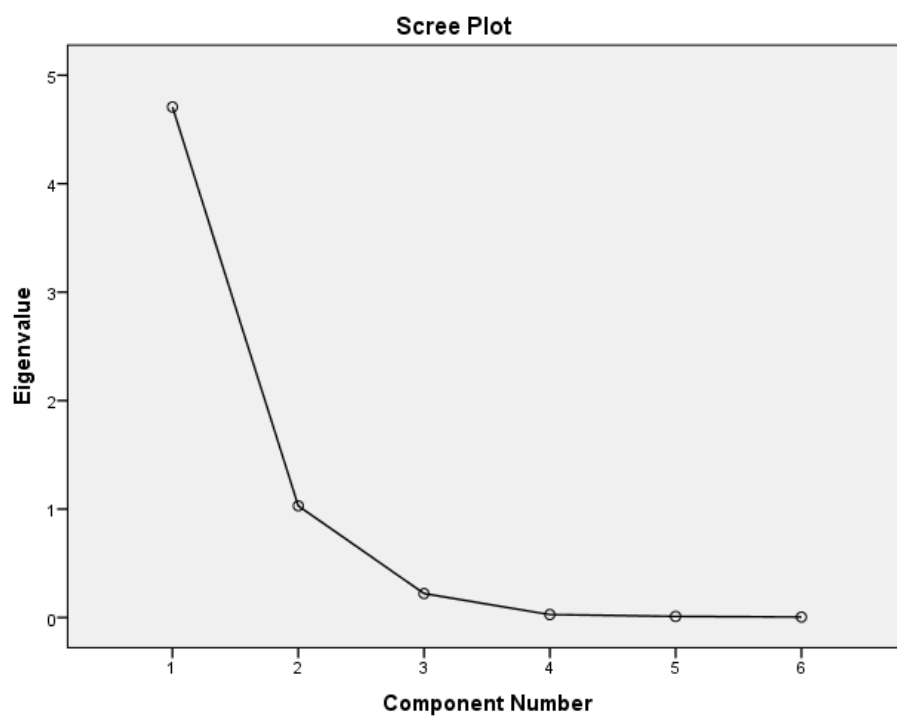
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.707	78.448	78.448	4.707	78.448
2	1.030	17.166	95.615	1.030	17.166
3	.221	3.685	99.299		
4	.027	.454	99.754		
5	.010	.171	99.925		
6	.004	.075	100.000		

Total Variance Explained

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	78.448	4.269	71.148	71.148
2	95.615	1.468	24.467	95.615
3				
4				
5				
6				

Extraction Method: Principal Component Analysis.



FAC1_1	FAC2_1
1.04257	1.20181
.77689	.72545
.02800	-.14202-
1.02397	-.29211-
.85026	-.41609-
-.54226-	1.12494
-1.51781-	.51543
-1.12425-	.44811
.60628	-1.64796-
-1.14365-	-1.51757-

- Read and explain this results.