

APPENDIX D:
Output of the Principal Component Analysis
(only using Bell Beaker objects)

APPENDIX D

FACTOR

```

/VARIABLES ng_LogSN ng_LogPB ng_LogAS ng_LogSB ng_LogAG ng_LogNI ng_LogBI
ng_LogFE /MISSING LISTWISE /ANALYSIS ng_LogSN ng_LogPB ng_LogAS ng_LogSB
ng_LogAG ng_LogNI ng_LogBI ng_LogFE
/PRINT INITIAL CORRELATION EXTRACTION ROTATION
/PLOT EIGEN ROTATION
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/SAVE REG(ALL)
/METHOD=CORRELATION .

```

Factor Analysis

Trace Element Analyses of Bell Beaker finds only

[DataSet1] \\eigg.sms.ed.ac.uk\Home\s0574277\dissertation\statistics\bbc.sav

Correlation Matrix

		ng_LogSN	ng_LogPB	ng_LogAS	ng_LogSB	ng_LogAG	ng_LogNI
Correlation	ng_LogSN	1.000	.335	.290	.325	.349	.328
	ng_LogPB	.335	1.000	.327	.202	.268	.413
	ng_LogAS	.290	.327	1.000	.248	-.222	.512
	ng_LogSB	.325	.202	.248	1.000	.463	.267
	ng_LogAG	.349	.268	-.222	.463	1.000	.031
	ng_LogNI	.328	.413	.512	.267	.031	1.000
	ng_LogBI	.352	.543	.412	.453	.250	.352
	ng_LogFE	.310	.543	.283	.262	.218	.274

Correlation Matrix

Appendix D

		ng_LogBI	ng_LogFE
Correlation	ng_LogSN	.352	.310
	ng_LogPB	.543	.543
	ng_LogAS	.412	.283
	ng_LogSB	.453	.262
	ng_LogAG	.250	.218
	ng_LogNI	.352	.274
	ng_LogBI	1.000	.285
	ng_LogFE	.285	1.000

Communalities

	Initial	Extraction
ng_LogSN	1.000	.442
ng_LogPB	1.000	.556
ng_LogAS	1.000	.752
ng_LogSB	1.000	.518
ng_LogAG	1.000	.847
ng_LogNI	1.000	.578
ng_LogBI	1.000	.555
ng_LogFE	1.000	.400

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	3.227	40.339	40.339
2	1.420	17.752	58.091
3	.907	11.332	69.422
4	.708	8.844	78.266
5	.616	7.700	85.966
6	.562	7.028	92.994
7	.304	3.801	96.794
8	.256	3.206	100.000

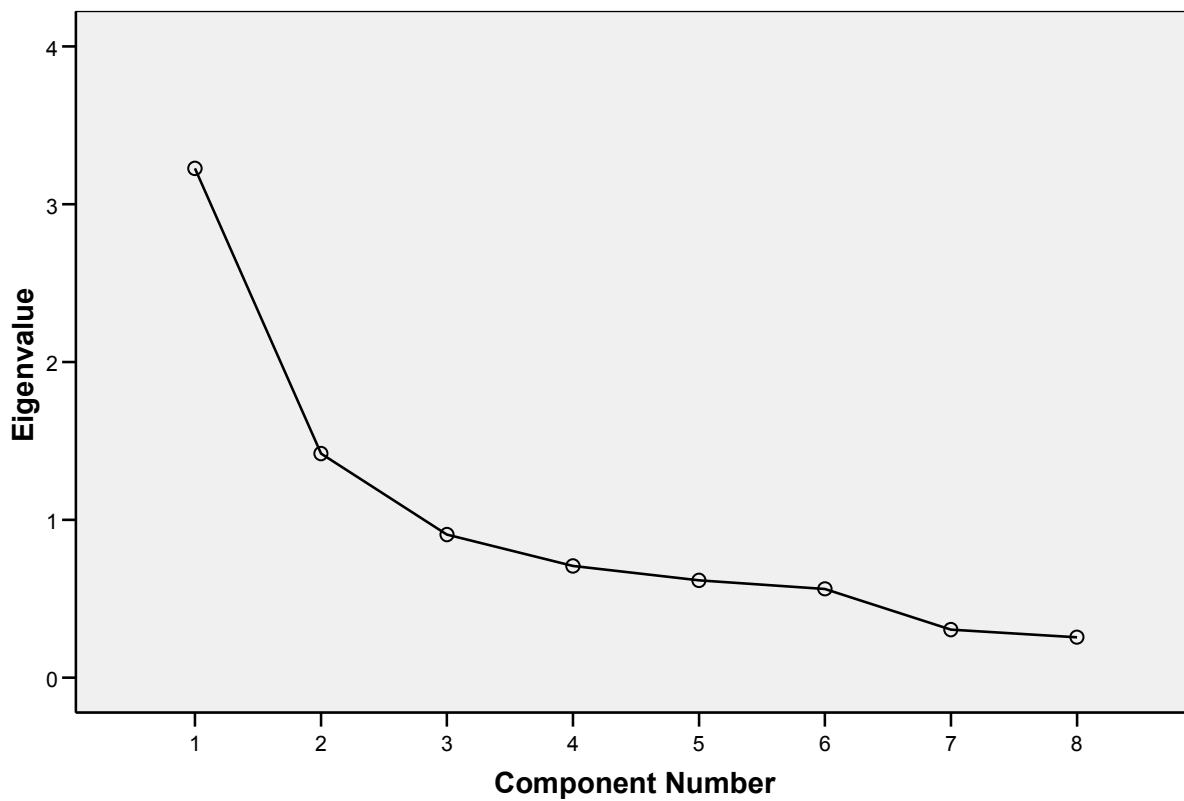
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.227	40.339	40.339	2.446	30.575	30.575
2	1.420	17.752	58.091	2.201	27.515	58.091
3						
4						
5						
6						
7						
8						

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix^a

	Component	
	1	2
ng_LogSN	.643	.168
ng_LogPB	.743	-.058
ng_LogAS	.586	-.639
ng_LogSB	.616	.372
ng_LogAG	.414	.822
ng_LogNI	.642	-.407
ng_LogBI	.745	-.006
ng_LogFE	.633	.008

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Rotated Component Matrix^a

	Component	
	1	2
ng_LogSN	.374	.549
ng_LogPB	.598	.445
ng_LogAS	.862	-.096
ng_LogSB	.219	.685
ng_LogAG	-.228	.892
ng_LogNI	.752	.115
ng_LogBI	.565	.486
ng_LogFE	.472	.422

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Component Transformation Matrix

Component	1	2
1	.753	.657
2	-.657	.753

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

Component Plot in Rotated Space

