Pisa Survey 2012

Hierarchical cluster analysis

n = 65 participating countries

stage	coefficient
63	34,147
64	56,789 → greatest jump

clusters = 65 - 63 = 2

Cluster 2 = Shanghai
Cluster 1 = all other countries

Pisa Survey 2012

Hierarchical cluster analysis

without Shanghai

n = 64 participating countries

Stage	Coefficient
62	22.825
63	34.147

> greatest jump

clusters = 64 - 62 = 2

Cluster 1 = Albania ... Cyprus (22)

Cluster 2 = Australia ... Vietnam (42)

Pisa Survey 2012
k-means cluster analysis
without Shanghai
n = 64 participating countries
clusters = 2

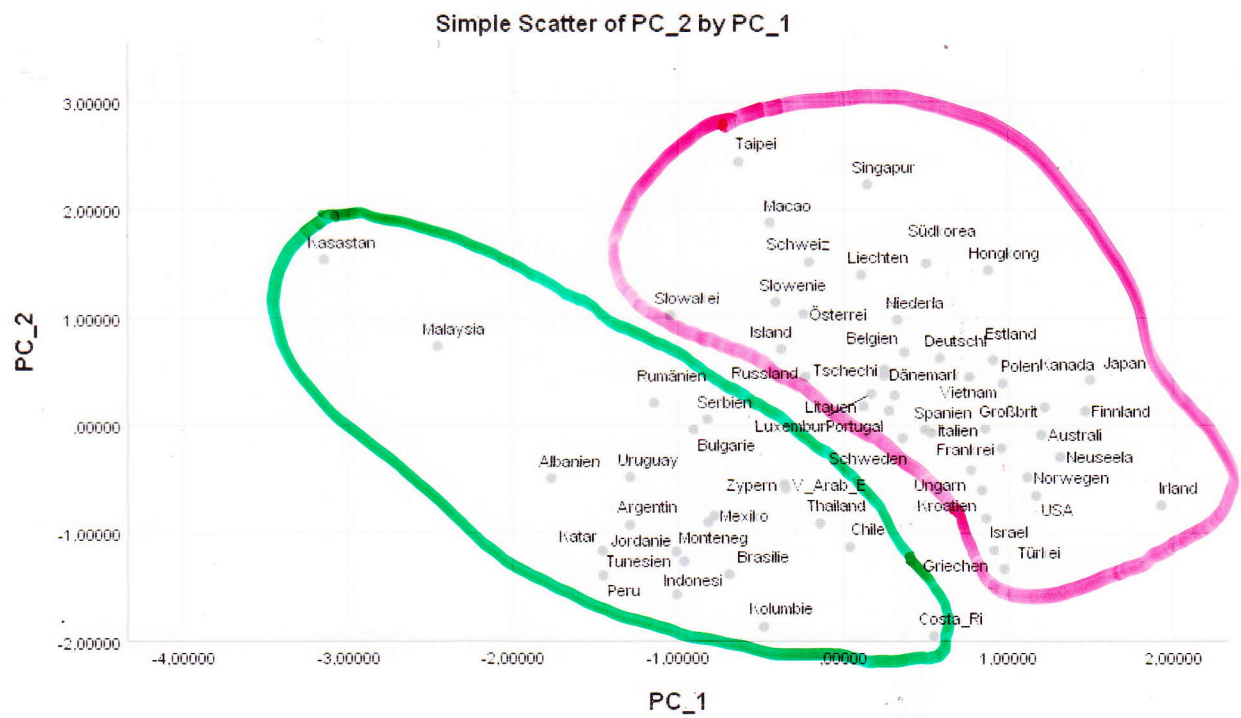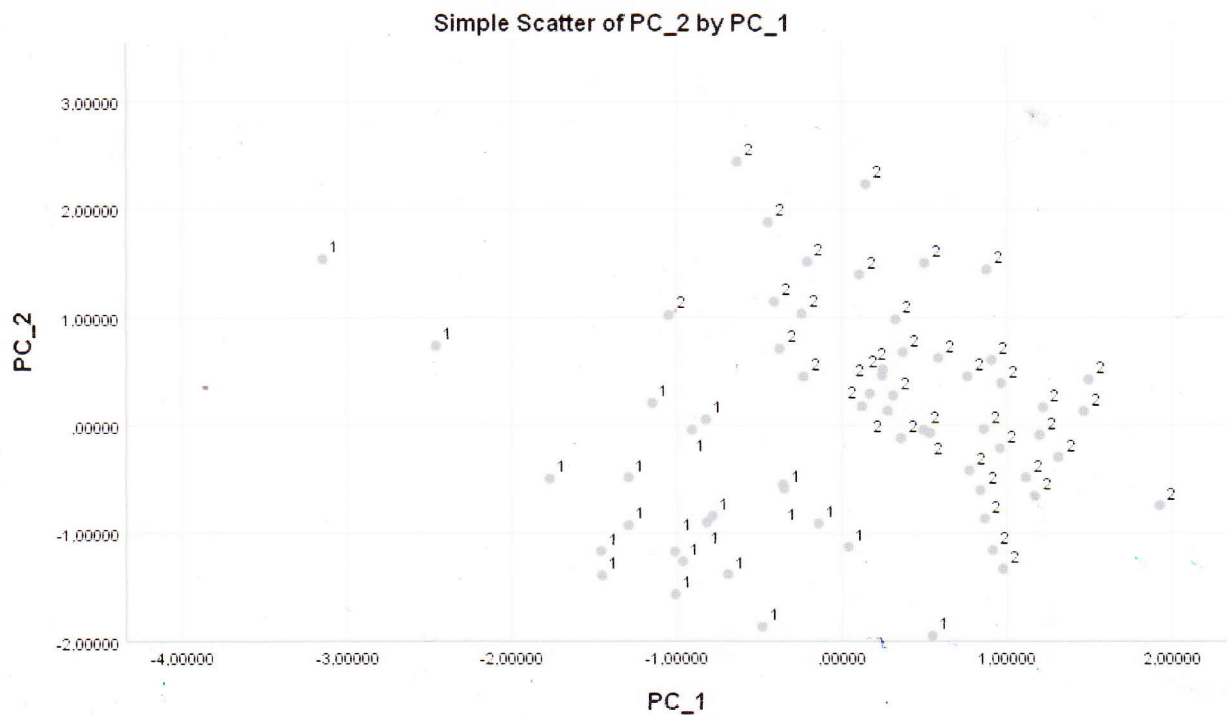|	Final cluster centers Cluster	
	1	2
Reading	416.18	501.98
Mathem.	408.68	503.88
Science	416.95	508.43
no. cases	22	42

Cluster 1 : low literacy
Albania ,..., Cyprus

Cluster 2 : high literacy
Australia ,..., Germany ,..., Vietnam

Pisa Survey 2012 (without Shanghai)

k-means cluster analysis

two clusters

Simple Scatter of PC_2 by PC_1

Simple Scatter of PC_2 by PC_1

Cluster 1

Cluster 2