

SUPPLEMENTARY MATERIAL

“In varietate concordia – Cluster Analysis of EQ-5D-5L value sets in European Union countries” – Quality of Life Research

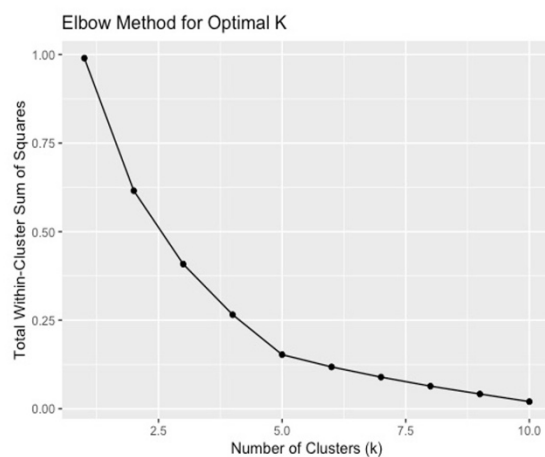
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K-Means Clustering

A



B

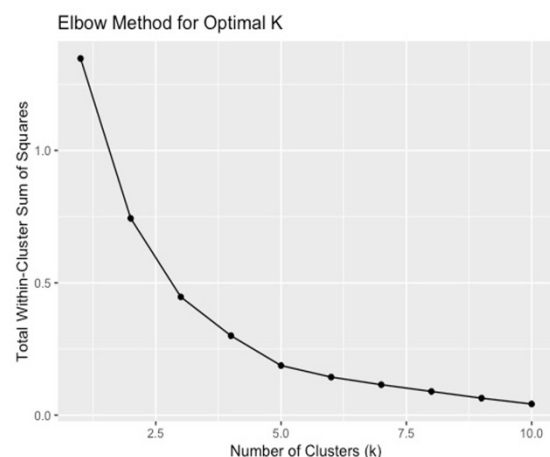


Figure 1. Elbow evaluation method plots for the 11 (A) and 13 (B) country cluster analysis with K-Means.

Optimal number of clusters (k) = 5

- 11 country analysis

Cluster 1	Hungary, Italy, Portugal
Cluster 2	Romania, Poland
Cluster 3	Denmark, Ireland
Cluster 4	France
Cluster 5	Belgium, Germany, Sweden

Compactness of clusters - Within cluster sum of squares by cluster:
(lower values mean more compact clusters)

1- 0.04221133
2- 0.02874450
3- 0.05614467
4- 0.02554400
5- 0.00000000

Separation of clusters (between_SS / total_SS):
(higher ratio means more separated clusters)

84.6 %

Conclusion: Clusters are also likely well defined and meaningful.

- 13 country analysis

Cluster 1	Belgium, Germany, Netherlands, Sweden
Cluster 2	Romania, Poland
Cluster 3	Hungary, Italy, Portugal
Cluster 4	Denmark, Ireland
Cluster 5	France, Spain

Compactness of clusters - Within cluster sum of squares by cluster:
(lower values mean more compact clusters)

1- 0.07614500
2- 0.02874450
3- 0.04221133
4- 0.02554400
5- 0.01476000

Separation of clusters (between_SS / total_SS):
(higher ratio means more separated clusters)

86.1 %

Conclusion: Clusters are likely well defined and meaningful.