FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION FOR HIGHER EDUCATION NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS Faculty of Computer Science

HOME PROJECT REPORT

On the course

MODERN METHODS OF DATA ANALYSIS

Analysis of the «World happiness» dataset

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Introduction

The purpose of this project is to practice the data analysis methods learned in the "Modern Data Analysis Methods" course. The main idea is to use real data and use the proposed technique to find out some patterns in the data, which not only helps to deal with some prediction goals, but also helps to understand the data structure. I'll work on this project with Python programming language, which is one of the most used data analysis languages, and it would be helpful to practice more in this project and get familiar with some of the previously unknown features of the available package.

The development environment which I have used is Google Colab, which is very comfortable to use in terms of its working environment and features. The main body of this report is divided into 6 sections: the first section is dedicated to the dataset description and all other sections represent the use of the techniques indicated in their titles.

For analysis I'll use "The world happiness report 2021" dataset, which is attached in Appendix I. The World Happiness Report is a landmark survey of the state of global happiness. The report continues to gain global recognition as governments, organizations and civil society increasingly use happiness indicators to inform their policy-making decisions. Leading experts across fields — economics, psychology, survey analysis, national statistics, health, public policy and more — describe how measurements of well-being can be used effectively to assess the progress of nations. The reports review the state of happiness in the world today and show how the new science of happiness explains personal and national variations in happiness. The happiness scores and rankings use data from the Gallup World Poll . The columns following the happiness score estimate the extent to which each of six factors — economic production, social support, life expectancy, freedom, absence of

corruption, and generosity — contribute to making life evaluations higher in each country than they are in Dystopia, a hypothetical country that has values equal to the world's lowest national averages for each of the six factors. They have no impact on the total score reported for each country, but they do explain why some countries rank higher than others.

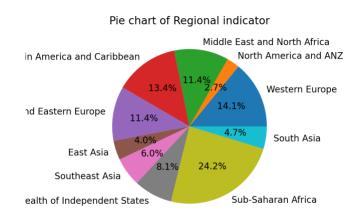
Dataset description

Happiness is the topic, which interests humanity many years. People always trying to find their happiness, and, sometimes they just trying to understand what happiness is, and what they need to do, to become happy. Of course for individuals it is a philosophic question, but anyways, people decided to measure happiness country by country with exact criterias, and collected "World happiness dataset", which will be analyzed during this project scopes.

The dataset is downloaded from Kaggle, the link is attached in References part. It has 149 objects and 15 features.

The features presented in the dataset are the following:

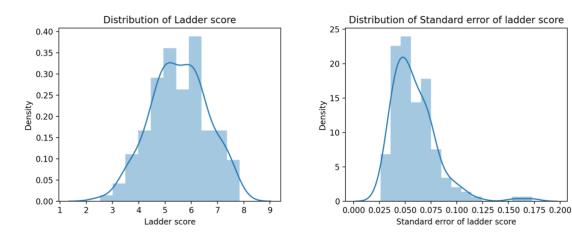
1. Regional indicator, which is categorical, nominal. The pie chart is showing its categories and the percentage of each category.



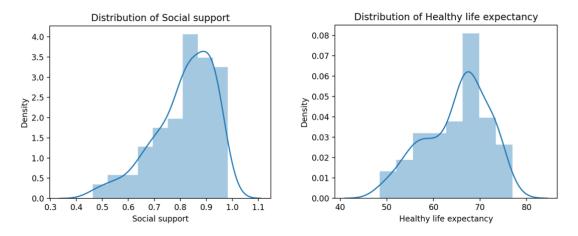
All other features are quantitative ranking variables.

2. Ladder score, which represents the Happiness score. The scale of measurement is from 0 to 10, but here we do not have maximum and minimum values.

The distribution of feature is represented in the left figure.

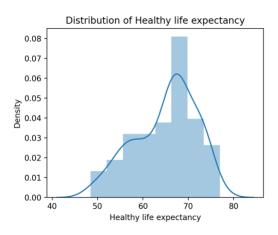


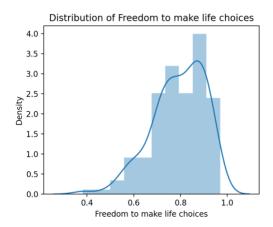
- 3. Standard error of ladder score, which distribution is from the right side.
- 4. Social support, which was measurement scale is from 0 to 1. This factor implies that social ties, or having relatives and friends one can rely on if needed, are among the factors which determine happiness.



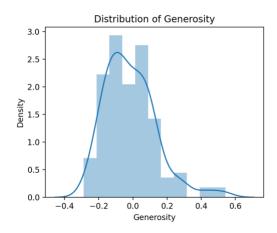
5. Healthy life expectancy, which represents the average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury. The distribution is from the left side.

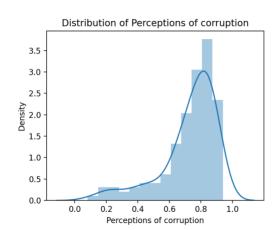
6. Freedom to make life choices which was measurement scale is from 0 to 1, the distribution is represented in the right side. Freedom means opportunity: opportunity to travel, to vote and be elected, to participate in demonstrations, to choose a carrier, etc.



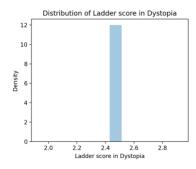


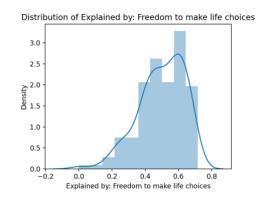
- 7. In the context of the WHI generosity is understood as the readiness of people to donate money to charities in relation to GDP per capita.
- 8. Perceptions of corruption, the distribution is from the right side.





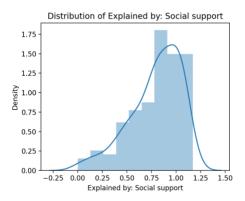
9. Ladder score in Dystopia, which has one value for all objects, so we do not need it for our analysis. Dropping this feature from the dataset.

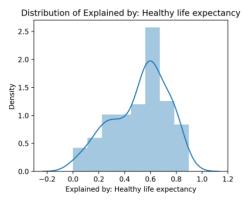


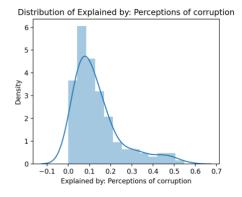


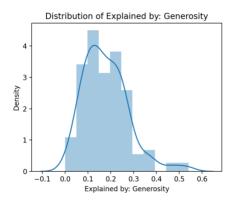
- 10. Explained by: Social support,
- 11. Explained by: Healthy life expectancy,
- 12. Explained by: Freedom to make life choices,
- 13. Explained by: Generosity,
- 14. Explained by: Perceptions of corruption

These features are representing the previous ones, but with some calculations done on them. These are calculated by multiplying average national data for the period of 2019-2021 for each of the six factors (minus the value of Dystopia)

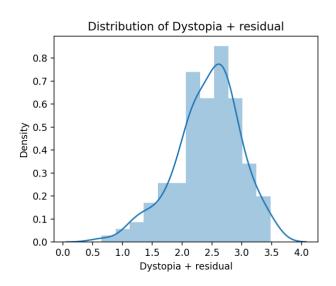








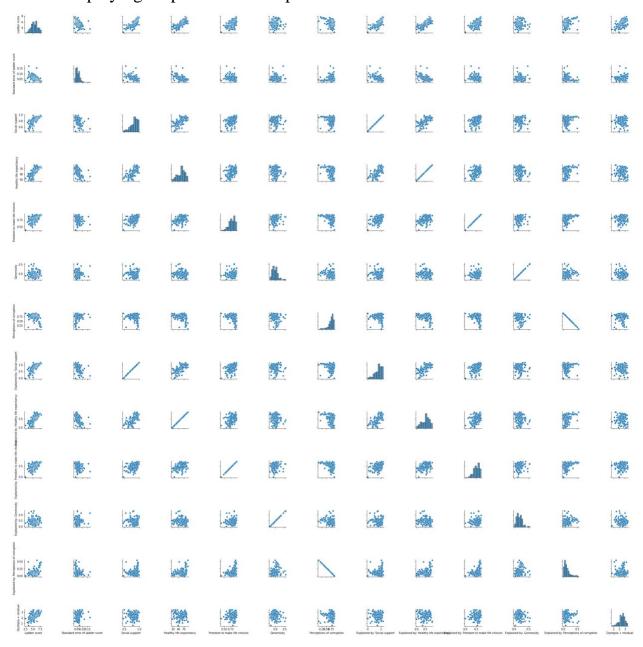
15. Dystopia + residual. Dystopia is an imaginary country that has the world's least-happy people. The purpose in establishing Dystopia is to have a benchmark against which all countries can be favorably compared (no country performs more poorly than Dystopia) in terms of each of the six key variables, thus allowing



each sub-bar to be of positive (or zero, in six instances) width. The residuals, or unexplained components, differ for each country, reflecting the extent to which the six variables either over- or under-explain average 2019-2021 life evaluations.

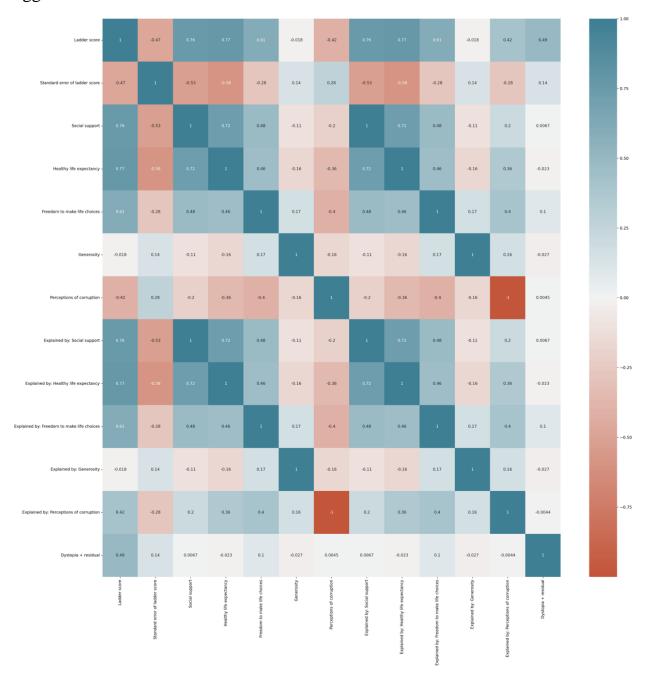
Correlation coefficient

For finding two features in the dataset with a more or less "linear-like" scatterplot, we are displaying all possible scatterplots from the data.



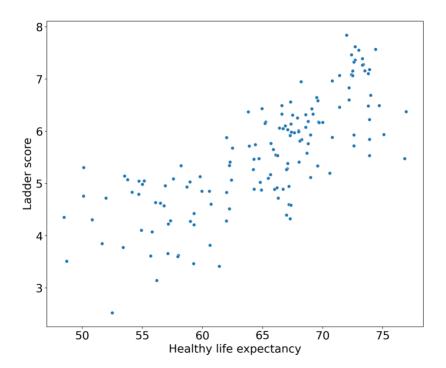
Seems we have too many scatterplots here, and it is hard to choose two variables using these scatterplots. For better performance, we create heatmap of correlation

coefficients between all features, and choose the two variables which have the biggest absolute value of correlation coefficient.



The maximum is 0.77, which is not unique case, so we can choose one pair of features of the pairs which have 0.77 correlation coefficient. We will choose Ladder score and Healthy life expectancy.

Here is the scatterplot of these two variables. Look likes it is around a line y=x, but there are some points which have more distance from the main cloud of points. Anyways, the correlation is good enough to continue our calculations.



A regression of Ladder score over Healthy life expectancy below: To have more 'comfortable' formulas, we will use HLE, instead of Healthy life expectancy in formulas, and LS instead of Ladder score.

$$LS = 0.12198682*HLE - 2.39542564$$

If HLE score is increasing by 1, the LS score is increasing by ≈ 0.1 . It is not very high correlation, but it seems that HLE have some visible impact on LS. The correlation coefficient is ≈ 0.77 and the coefficient of determination is ≈ 0.59 . It means that 100% change of HLE causes 59% of LS change, which is a big difference.

We have predicted 3 target values for 3 randomly chosen from dataset predictor's values. Absolute relative percentage errors are calculated according to formulas which are written below.

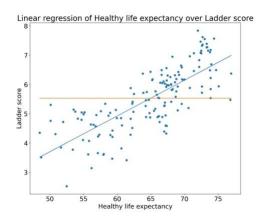
$$E1 = \frac{|real - predicted|}{|real|} * 100$$

$$E2 = \frac{|real - predicted|}{|predicted|} * 100$$

Values which we have got are represented in table:

HLE	LS(real)	LS(predicted)	Absolute	Relative	Relative
			error	absolute	absolute
				percentage	percentage
				error (over	error (over
				real value)	predicted
					value)
67.102	5.384	5.79013368	0.40613368	7.54334476	7.01423671
67.906	6.255	5.88821108	0.36678892	5.86393154	6.22920804
60.633	3.819	5.00100097	1.18200097	30.950536	23.63528776

We have predicted values of LS over all values of HLE in the scatterplot



Mean relative percentage errors E_1 = 11.03%, E_2 = 10.52%. They are quite close to each other, and not so high numbers.

PCA/SVD

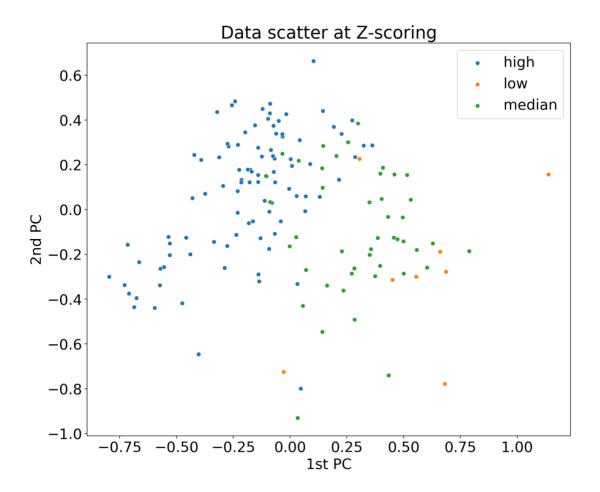
For this task I'm taking features Social support, Healthy life expectancy, Freedom to make life choices, Generosity, Perceptions of corruption. The reason is that they all are describing happiness score, and are key components of this dataset.

2. We standardize the selected subset using 3 versions of normalization: z-scoring, range, and ranking. The latest will be used in the last task in this paragraph. Data scatter for z-scoring is 745, for range normalization 32.418. Then computing SVD for both these standardizations and using their singular values calculate contribution of all the principal components to the corresponding data scatters. The results are shown below:

Number of PC	Z-scoring	Z-scoring per	Range natural	Range per cent
	natural	cent		
1	350	46.9	16.68	51.5
2	183	24.5	6.93	21.4
3	104	14.1	4.21	12.9
4	71	9.6	2.74	8.5
5	37	4.9	1.86	5.7
Data scatter	745	100	32.42	100

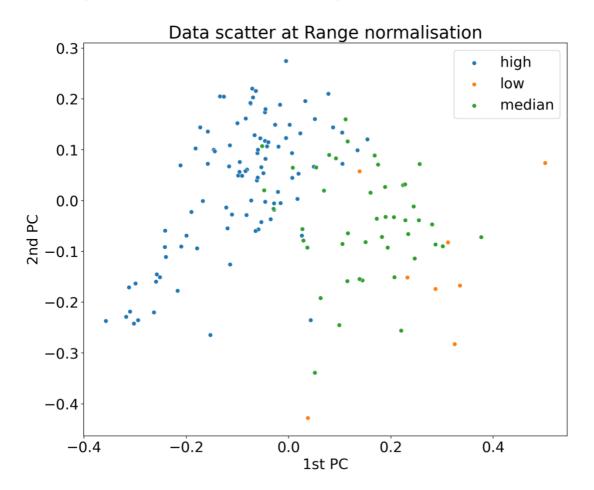
Here we can see that data scatter is divided between all the principal component more or less equally. This may be bad, because we are trying to find some hidden factor which will allow to describe why data is scattered in the observed way but as contributions are close to each other we probably just recombine existing features into new ones.

Then we visualize the data using two first principal components using two versions of standardization: z-scoring (first figure) and range (second figure). For coloring we are using categorized Social support: high stands for >=0.8, median for [0.6,0.8) and low for <0.6.



It is obvious that in both cases the 1st principal component is strongly connected with value of Social support (as Social support are in the selected subset, this component should be based on their concentration more than on other features). Also, we see some slope in scatter in categories, so 2nd PC seems also be impacted by Social support but not so hard as the first one. In addition, in range normalized

data this dependency is a bit stronger as we see that points on scatterplot are less shuffled(the difference is little but it exists).

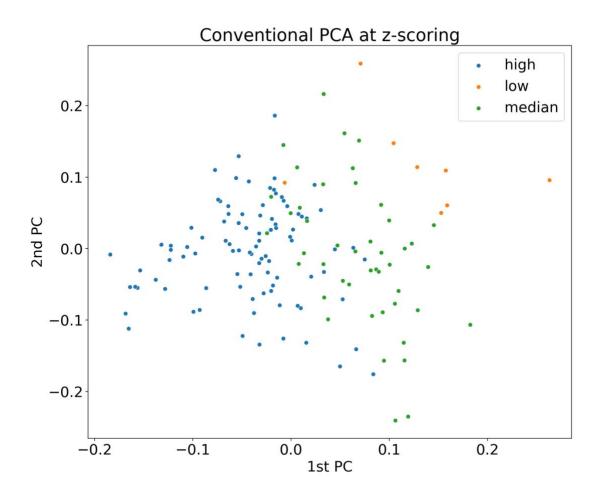


Loadings for both standardizations are presented below:

Standardization	Number of	Social	Healthy	Freedom	Generosity	Perceptions
	PC	support	life	to make		of
			expectancy	life		corruption
				choices		
Z-scoring	1	-0.538	0.27	-0.36	-0.264	-0.662
Z-scoring	2	-0.563	0.24	-0.002	-0.364	0.701
Range	1	-0.561	0.29	0.321	-0.140	-0.690
Range	2	-0.641	0.22	0.121	-0.351	0.632

As we can see here, for Z-scoring values of first two features the difference is little. For Freedom to make life choices we have completely another situation, for 2nd score it is very close to 0.

4. We are using conventional PCA to find two first principal components at z-scoring standardization. The results are the same as above, up to sign so when visualizing, we change the sign and now getting a bit another picture. It is look like previous one, but still has some differences



5. Using rank normalized data pre-processed in the first subparagraph, we found hidden ranking factor. Unfortunately, I get some loadings negative, but I do not have any reasons to change the direction of growth for any feature even though

some of them are correlated negatively, as there is no strong recommendation for content of substances to be minimized or maximized – all of them should be somewhere in between. So, I change sign of loading vector in order to make the loadings with the biggest absolute values positive.

Then we are finding hidden ranking factor α =-1.8. The equation for the PCA hidden score vector is shown in the formula

z = -0.9* Social support + 0.5* Healthy life expectancy - 0.4* Freedom to make life choices + 0.4* Generosity + 1.4* Perceptions of corruption Contribution is 93% which is really high comparing to the previous normalizations.

K-means

Selection of up to 6 features: as there's no visible reasonable ideas (from feature histograms or their correlations), we have decided to pick 5 of the features with which they are measuring happiness score: Social support, Healthy life expectancy, Freedom to make life choices, Generosity, Perceptions of corruption.

These features need normalization, as they are measured with different scales. After selecting features and normalization we are applying K-means algorithm with K=5 and K=9. In both cases it runs the 1000 random initializations and save the best result. The quality measure here is inertia, which measures distances between instances in clusters and centers of clusters they belong to. The less is the inertia the better is the cauterization. We are getting inertia for K=5 \approx 11.9 and for K=9 \approx 8.7.

For interpretation of clusters, we are getting their centers and multiple all the values by 100. Thus, every value shows how much in percent feature value in cluster center differs from the mean value of the corresponding feature.

Results for K=5 are presented below:

	Social support	Healthy life expectancy	Freedom to make life choices	Generosity	Perceptions of corruption
0	21,77981	26,32422	20,50094	11,24968	-39,3646
1	-5,77513	-6,6688	-20,5988	-16,5587	7,198739
2	11,11132	12,30457	5,262307	-7,79985	7,400624
3	-12,5623	-12,7741	8,14224	25,85003	1,538146
4	-31,8971	-37,8097	-19,3669	4,469184	7,200739

There are no values, which have high deviation from the mean, all are <50%. So in our case we can consider 10% as meaningful.

Cluster 0: Healthy life expectancy have value higher than average, with the highest percent (from those which are more than mean value) compared with other clusters, and other features in the same cluster. Social support and Freedom to make life choices also has big (compared with other values we have) difference from the mean. Generosity is closer to mean then these features mentioned earlier and Perceptions of corruption is less then mean with the highest percentage from all the features and clusters.

Cluster 1: In this cluster except Perceptions of corruption, all percents are negative. Means all features have less values then mean. But here all percentages except Freedom to make life choices and Generosity are <10%, so the differences are just a little.

Cluster 2: Here we have Healthy life expectancy and Social support values as >10%, which means they are a bit (meaningful quantity) more than mean. Other features differ from the mean just a little.

Cluster 3: Generosity is higher then mean, with a high percentage. Healthy life expectancy and Social support again have meaningful difference from the mean. The other features difference is little.

Cluster 4: Healthy life expectancy, Social support and Freedom to make life choices have been reduced, other two have been increased but just a little.

So, all the clusters are different and can be used to categorize happiness score. The most meaningful differences are seen in cluster 0, as all features have >20% difference from the mean value.

Results for K=9 are presented below:

	Social support	Healthy life expectancy	Freedom to make life choices	Generosity	Perceptions of corruption
0	-28,6433	-21,9547	15,54467	14,28123	-18,1388
1	6,75719	8,234555	-23,2608	-8,79318	11,62301
2	22,18705	28,83756	19,14611	8,662522	-45,3335
3	-10,8923	-31,5903	-16,2222	-2,43151	11,48103
4	-21,4894	-17,884	-9,17188	50,05633	3,273085
5	10,68253	6,222264	17,00526	18,26564	4,930714
6	-42,5883	-37,3687	-20,8256	3,845776	4,131561
7	14,05792	16,01782	6,993305	-12,1679	7,807387
8	-9,77147	-1,34972	5,680729	-14,2087	-1,3438

Here we can see just one value $\approx 50\%$, all other are < 50%. So in this case too we can consider 10% as meaningful.

Cluster 0: Here also this cluster has meaningful differences from mean. Freedom to make life choices and Generosity got values more than the mean value, but others have been reduced.

Cluster 1: Except Freedom to make life choices and Perceptions of corruption others have a little difference.

Cluster 2: Except Generosity, all other features have meaningful difference from mean value. The first 3 features have been increased, while Perceptions of

corruption have been reduced by 45%, which is 2nd biggest difference in these clusters.

Cluster 3: Here we have meaningful differences, except Generosity. The interesting thing is, that in this cluster first 3 were reduced, and Perceptions of corruption increased, it is like vice versa of 2nd cluster, just with less percents.

Cluster 4: Here we have the biggest percent difference from mean, which is for feature Generosity. It has been increased approximately with 50%. Healthy life expectancy and Social support were reduced, with meaningful percentages. Other features difference is little.

Cluster 5: Here all features were increased, but only Social support, Freedom to make life choices and Generosity have been increased with >10%.

Cluster 6: The first 3 features were reduced, with meaningful percentages. Other features have been increased, but the difference is a little.

Cluster 7: Again, like in cluster 5 Social support, Freedom to make life choices and Generosity have meaningful changes. But in this case Generosity was reduced.

Cluster 8: Except Generosity all features have just a little difference here.

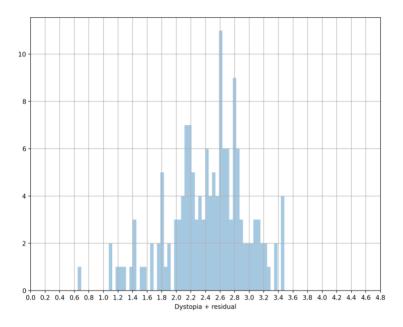
So, all the clusters are different and can be used to categorize happiness score. The most features meaningful differences are seen in cluster 0 as all features have >10% difference from the mean value, and in cluster 2, 3 where 4 of 5 features have meaningful differences from mean.

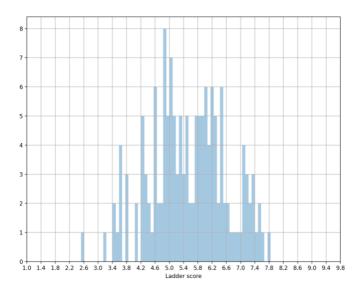
We have no reason other than quality metric, which is inertia, to say what of partitions is better. And as inertia of 9-clusters partition is lower, it is obvious that according to this criterion, we can conclude that the case with K=9 is better than the case with K=5.

Contingency table

1. I'm taking Dystopia + residual, as this feature I used less then others, it will be interesting to use this time. The second one is Ladder score, as it was not used in making clusterization and it may be interesting to check its dependency between developed partition and feature non-used for clustering or not.

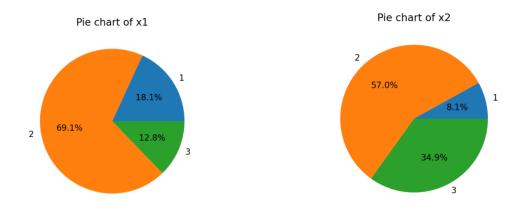
Histograms for features are below:





From both histograms we can see, that there is no extraordinary results for these features, which will create troubles for analysis. So we continue.

Then using some of minimum-like drops in the histograms we divide features on enumerated categories as follows: for Dystopia + residual -1: <2, 2: [2,3), 3: >=3; for Ladder score -1: <4, 2: [4,6), 3: >=6;. The pie charts of the developed nominal representations x1 and x2 (respectively, for Dystopia + residual and Ladder score) are presented below:



We use a partition S with 5 clusters from the previous paragraph. Using this partition and features x1 and x2 we built two contingency tables:

S\x1	1	2	3	Total
0	7	49	7	63
1	2	18	1	21
2	4	12	9	25
3	6	14	1	21
4	8	10	1	19
Total	27	103	19	149

S \ x2	1	2	3	Total
0	0	32	31	63
1	0	1	20	21
2	7	18	0	25
3	2	19	0	21
4	3	15	1	19
Total	12	85	52	149

In order to calculate the conditional frequency and Quetelet relative index tables we will use these tables.

Conditional frequency table of S given x1

	1	2	3	Total
S\x1				
0				
	0,259259	0,475728	0,368421	0,422819
1				
	0,074074	0,174757	0,052632	0,14094
2				
	0,148148	0,116505	0,473684	0,167785
3				
	0,222222	0,135922	0,052632	0,14094
4				
	0,296296	0,097087	0,052632	0,127517
Total				
	0,181208	0,691275	0,127517	1

Despite the fact that all numbers seem not really high, we can obtain meaningful information from table. It is obvious, for example, that given low content of Dystopia + residual is very less for 1st cluster. The possibility to get 4th cluster is

higher than any other and possibilities of clusters 0 and 3 are quite close to each other. Given 2nd category of Dystopia + residual – median – we also almost cannot get 4th cluster and can get any of other cluster with close possibilities. But here we see, that for cluster 0 it has bigger possibility then for others. Cluster 2,3 are close results to each other. This interpretation is obviously tied with explanation of cluster. The 3rd one is biggest for cluster 3. An interesting fact, for clusters 1,3 and 4 it is very less, and it is the same number for this 3 clusters.

Quetelet relative index table of S given x1

	1	2	3	Total
0	-0,38683	0,125135	-0,12865	0,422819
1	-0,47443	0,239945	-0,62657	0,14094
2	-0,11704	-0,30563	1,823158	0,167785
3	0,57672	-0,0356	-0,62657	0,14094
4	1,323587	-0,23863	-0,58726	0,127517
Total	0,181208	0,691275	0,127517	1

Here we see much more higher values and they can really help in interpretation of categories. So here we see, that first category makes the probability increased by 57%, so the dependence between first category and 3rd cluster is more pronounced. But still, the biggest dependency for first category is with 4th cluster, it is 132%. The biggest dependency from all categories, has 3rd one, with second cluster, which is 182%.

Conditional frequency table of S given x2

	1	2	3	Total
0		0.0= 1.1=1	0.70.41.71	0.400040
	0	0,376471	0,596154	0,422819
1	0	0,011765	0,384615	0,14094
2	0,583333	0,211765	0	0,167785
3	0,166667	0,223529	0	0,14094
4	0,25	0,176471	0,019231	0,127517
Total	0,080537	0,57047	0,348993	1

Here we have many 0's. For first category 0 and 1st clusters has 0's, which is not allowing us to tell anything about this. Median is more or less good results, thus in 1st cluster we have very less number, which is close to 0, so here there is 0 probability for dependency.

Quetelet relative index table of S given x2

	1	2	3	Total
0	-1	-0,10962	0,409951	0,422819
1	-1	-0,91653	1,728938	0,14094
2	2,476667	0,262118	-1	0,167785
3	0,18254	0,585994	-1	0,14094
4	0,960526	0,383901	-0,84919	0,127517
Total	0,080537	0,57047	0,348993	1

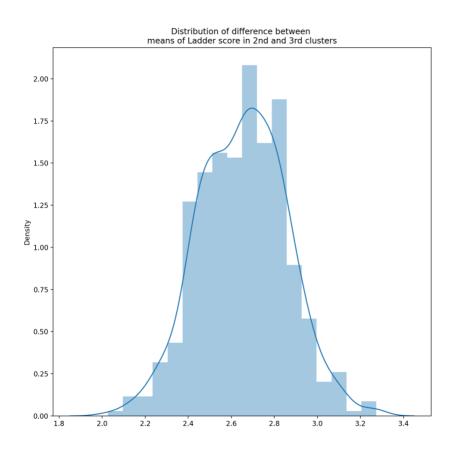
First category makes the probability increased by 247%, so the dependence between first category and 2nd cluster is more pronounced, which is the biggest

value from the whole table. The second biggest dependency for first category is with 4th cluster, it is 96%. Second category also shows a good results, here we can see 59% and 38% dependencies which 3rd and 4th clusters respectively.

- 3. We have calculated average Quetelet indices for both tables. In the 1st case Q1=0.18, in the 2nd Q2=0.57. Meanings are that on average knowledge of categories of Dystopia+../Ladder score increases frequency of clusters by 18%/57%. We see that in 2nd case association is higher, when in the 1st, it is not so much, but both cases gives us useful information. Calculation of chi-squared indices for both tables has shown that they are equal to average Quetelet indices. This proves theoretical statement of their equality.
- 4. Using chi-squared statistics calculated at the previous step,we are checking how many observations are enough to say that features are associated. For this goal I take quantiles of chi-square distribution of level 95% and 99%. We have (3-1)*(5-1)=8 degrees of freedom. Dividing these quantiles by calculated statistic, I get the following results: in the first case we need 84 observations for 95% confidence and 108 for 99% confidence. Thus, Sulfate and partition are obviously associated. In the second case we need 27 observations for 95% and 35 for 99%. For both confidence levels we have not enough samples, so we see Conductivity and partition as not associated.

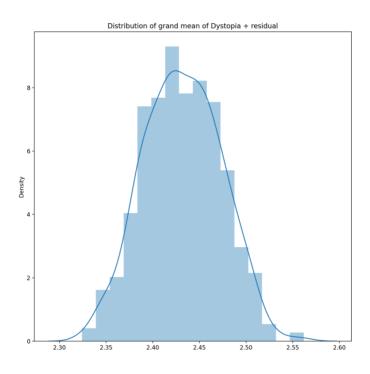
Bootstrap

For comparing means of one feature in two clusters we take partition with 9 clusters and feature Ladder score. The clusters for comparison are 2 and 3. To compare means running bootstrap 500 times and thus get 500 differences between means in 2^{nd} and 3^{rd} clusters. Then, we use two methods: pivotal and non-pivotal to evaluate 95% confidence interval for difference between means. Pivotal gives (2.2580, 3.0511), non-pivotal gives (2.2597, 3.0685). Therefore, in both cases zero is not within the interval so there is a statistically significant difference between the means in this clusters. Means , that Ladder score is a factor describing difference between these two clusters. Indeed, it was not used for building clusterisation, and did not impact it.

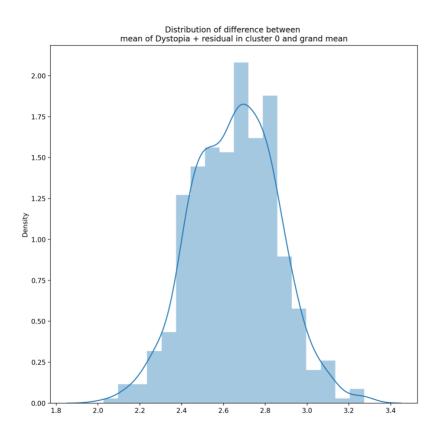


The reason why we need bootstrapping to conclude the above is that real difference between means in two cluster is not exactly zero. And, of course, we also could build a confidence interval using just real means in clusters and standard deviation. But the idea of confidence interval here is that it is built for normally distributed samples. However, feature distribution is less normal than one we get after using bootstrapping. Thus, using bootstrapping technique we make all requirements of confidence intervals usage satisfied and can fully rely on this method.

2. For calculating 95% confidence interval for grand mean of a feature we take feature Explained by: Healthy life expectancy. Here we also run the algorithm 500 times. According to pivotal version, grand mean lies in (0.4859, 0.5579) to non-pivotal – in (0.4866, 0.5601). The real mean – 0.52 – is also within the intervals.



3. For comparison of grand-mean and within-cluster mean we take feature Dystopia + residual and cluster 0. Using the same technique as in 1st subparagraph, I get intervals (-1.25, 0.05) if rounded up to 2nd number after the dot for both pivotal and non-pivotal methods. So, zero is within this interval and thus grand mean and within cluster mean are equal with 95% confidence. Again, Dystopia + residual was not used for clusterisation. If I take some other feature that was used and got the same result it will mean that this cluster can be described as the one with the mean values of a taken feature.



Conclusion

So we analyzed the data about happiness, which gave understanding usage of concepts such as Correlation coefficient, PCA/SVD, K-means, Contingency table, Bootstrap.

Working on this project has provided me with the experience on working with data in direction of its interpreting just as it was supposed. We used a number of techniques for working, understanding and analyzing the data.

The practice work gave understanding of Data analysis concepts deeper, and this knowledge will help to work not only for data processing and building some automated decision-making structures but also as tools for interpretable work with data.

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- [5] https://www.who.int/data/gho/indicator-metadata-registry/imr-details/66

Appendix I

Country name	Regional indicator	Lad der scor e	Stand ard error of ladde r score	Socia l supp ort	Health y life expecta ncy	Freed om to make life choic es	Genero sity	Percept ions of corrupti on	Ladde r score in Dysto pia	Explai ned by: Social suppor t	Explain ed by: Health y life expecta ncy	Explai ned by: Freedo m to make life choice s	Explain ed by: Genero sity	Explain ed by: Percept ions of corrupti on	Dysto pia + residu al
Finland	Western Europe	7.84 2	0.032	0.95 4	72.000	0.949	-0.098	0.186	2.430	1.106	0.741	0.691	0.124	0.481	3.253
Denmark	Western Europe	7.62 0	0.035	0.95 4	72.700	0.946	0.030	0.179	2.430	1.108	0.763	0.686	0.208	0.485	2.868
Switzerla nd	Western Europe	7.57 1	0.036	0.94 2	74.400	0.919	0.025	0.292	2.430	1.079	0.816	0.653	0.204	0.413	2.839
Iceland	Western Europe	7.55 4	0.059	0.98 3	73.000	0.955	0.160	0.673	2.430	1.172	0.772	0.698	0.293	0.170	2.967
Netherla nds	Western Europe	7.46 4	0.027	0.94 2	72.400	0.913	0.175	0.338	2.430	1.079	0.753	0.647	0.302	0.384	2.798
Norway	Western Europe	7.39 2	0.035	0.95 4	73.300	0.960	0.093	0.270	2.430	1.108	0.782	0.703	0.249	0.427	2.580
Sweden	Western Europe	7.36 3	0.036	0.93 4	72.700	0.945	0.086	0.237	2.430	1.062	0.763	0.685	0.244	0.448	2.683
Luxembo urg	Western Europe	7.32 4	0.037	0.90 8	72.600	0.907	-0.034	0.386	2.430	1.003	0.760	0.639	0.166	0.353	2.653
New Zealand	North America and ANZ	7.27 7	0.040	0.94 8	73.400	0.929	0.134	0.242	2.430	1.094	0.785	0.665	0.276	0.445	2.612
Austria	Western Europe	7.26 8	0.036	0.93 4	73.300	0.908	0.042	0.481	2.430	1.062	0.782	0.640	0.215	0.292	2.784
Australia	North America and ANZ	7.18 3	0.041	0.94 0	73.900	0.914	0.159	0.442	2.430	1.076	0.801	0.647	0.291	0.317	2.598
Israel	Middle East and North Africa	7.15 7	0.034	0.93 9	73.503	0.800	0.031	0.753	2.430	1.074	0.788	0.509	0.208	0.119	3.083
Germany	Western Europe	7.15 5	0.040	0.90 3	72.500	0.875	0.011	0.460	2.430	0.993	0.757	0.600	0.195	0.306	2.824
Canada	North America and ANZ	7.10 3	0.042	0.92 6	73.800	0.915	0.089	0.415	2.430	1.044	0.798	0.648	0.246	0.335	2.585
Ireland	Western Europe	7.08 5	0.040	0.94 7	72.400	0.879	0.077	0.363	2.430	1.092	0.753	0.606	0.238	0.367	2.384
Costa Rica	Latin America and Caribbean	7.06 9	0.056	0.89	71.400	0.934	-0.126	0.809	2.430	0.966	0.722	0.673	0.105	0.083	3.387

United Kingdom	Western Europe	7.06 4	0.038	0.93 4	72.500	0.859	0.233	0.459	2.430	1.062	0.757	0.580	0.340	0.306	2.596
Czech Republic	Central and Eastern Europe	6.96 5	0.049	0.94 7	70.807	0.858	-0.208	0.868	2.430	1.090	0.703	0.580	0.052	0.046	3.124
United States	North America and ANZ	6.95 1	0.049	0.92 0	68.200	0.837	0.098	0.698	2.430	1.030	0.621	0.554	0.252	0.154	2.807
Belgium	Western Europe	6.83 4	0.034	0.90 6	72.199	0.783	-0.153	0.646	2.430	0.998	0.747	0.489	0.088	0.187	2.862
France	Western Europe	6.69 0	0.037	0.94 2	74.000	0.822	-0.147	0.571	2.430	1.081	0.804	0.536	0.092	0.235	2.521
Bahrain	Middle East and North Africa	6.64 7	0.068	0.86 2	69.495	0.925	0.089	0.722	2.430	0.899	0.662	0.661	0.246	0.139	2.631
Malta	Western Europe	6.60 2	0.044	0.93 1	72.200	0.927	0.133	0.653	2.430	1.055	0.747	0.664	0.275	0.183	2.268
Taiwan Province of China	East Asia	6.58 4	0.038	0.89 8	69.600	0.784	-0.070	0.721	2.430	0.982	0.665	0.490	0.142	0.139	2.687
United Arab Emirates	Middle East and North Africa	6.56 1	0.039	0.84	67.333	0.932	0.074	0.589	2.430	0.860	0.594	0.670	0.236	0.223	2.422
Saudi Arabia	Middle East and North Africa	6.49 4	0.056	0.89	66.603	0.877	-0.149	0.684	2.430	0.964	0.571	0.603	0.090	0.163	2.668
Spain	Western Europe	6.49 1	0.042	0.93 2	74.700	0.761	-0.081	0.745	2.430	1.057	0.826	0.462	0.135	0.124	2.513
Italy	Western Europe	6.48 3	0.045	0.88 0	73.800	0.693	-0.084	0.866	2.430	0.940	0.798	0.379	0.133	0.047	2.794
Slovenia	Central and Eastern Europe	6.46	0.043	0.94 8	71.400	0.949	-0.101	0.806	2.430	1.093	0.722	0.690	0.122	0.085	2.388
Guatemal a	Latin America and Caribbean	6.43 5	0.073	0.81	64.958	0.906	-0.038	0.775	2.430	0.790	0.519	0.638	0.163	0.105	3.375
Uruguay	Latin America and Caribbean	6.43	0.046	0.92 5	69.100	0.896	-0.092	0.590	2.430	1.042	0.649	0.625	0.128	0.223	2.600
Singapore	Southeast Asia	6.37 7	0.043	0.91 5	76.953	0.927	-0.018	0.082	2.430	1.019	0.897	0.664	0.176	0.547	1.379
Kosovo	Central and Eastern Europe	6.37 2	0.059	0.82	63.813	0.869	0.257	0.917	2.430	0.807	0.483	0.593	0.356	0.014	3.182

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Slovakia	Central and Eastern Europe	6.33 1	0.041	0.93 6	69.201	0.766	-0.124	0.911	2.430	1.066	0.653	0.468	0.107	0.018	2.714
Brazil	Latin America and Caribbean	6.33	0.043	0.88	66.601	0.804	-0.071	0.756	2.430	0.944	0.571	0.514	0.142	0.117	3.015
Mexico	Latin America and Caribbean	6.31 7	0.053	0.83	68.597	0.862	-0.147	0.799	2.430	0.830	0.634	0.585	0.092	0.089	2.961
Jamaica	Latin America and Caribbean	6.30 9	0.156	0.87 7	67.500	0.890	-0.137	0.884	2.430	0.932	0.599	0.618	0.099	0.035	3.135
Lithuania	Central and Eastern Europe	6.25 5	0.045	0.93 5	67.906	0.773	-0.203	0.826	2.430	1.065	0.612	0.476	0.056	0.073	2.624
Cyprus	Western Europe	6.22 3	0.049	0.80 2	73.898	0.763	-0.015	0.844	2.430	0.765	0.801	0.464	0.178	0.061	2.578
Estonia	Central and Eastern Europe	6.18 9	0.038	0.94	68.800	0.909	-0.106	0.527	2.430	1.079	0.640	0.641	0.119	0.263	2.103
Panama	Latin America and Caribbean	6.18 0	0.073	0.89 6	69.652	0.872	-0.166	0.856	2.430	0.976	0.667	0.596	0.079	0.053	2.509
Uzbekista n	Commonw ealth of Independe nt States	6.17 9	0.068	0.91 8	65.255	0.970	0.311	0.515	2.430	1.027	0.528	0.716	0.391	0.271	2.477
Chile	Latin America and Caribbean	6.17 2	0.046	0.88	70.000	0.742	-0.044	0.830	2.430	0.946	0.678	0.438	0.159	0.070	2.682
Poland	Central and Eastern Europe	6.16 6	0.040	0.89 8	69.702	0.841	-0.165	0.735	2.430	0.982	0.668	0.558	0.080	0.130	2.438
Kazakhst an	Commonw ealth of Independe nt States	6.15 2	0.047	0.95 2	65.200	0.853	-0.069	0.733	2.430	1.103	0.527	0.573	0.143	0.132	2.446
Romania	Central and Eastern Europe	6.14	0.057	0.83	67.355	0.845	-0.219	0.938	2.430	0.832	0.595	0.564	0.045	0.001	2.830
Kuwait	Middle East and North Africa	6.10 6	0.066	0.84	66.900	0.867	-0.104	0.736	2.430	0.857	0.580	0.591	0.120	0.130	2.368

Serbia	Central	6.07	0.053	0.87	68.600	0.778	0.002	0.835	2.430	0.924	0.634	0.482	0.189	0.066	2.682
	and Eastern Europe	8		3											
El Salvador	Latin America and Caribbean	6.06 1	0.065	0.76 2	66.402	0.888	-0.110	0.688	2.430	0.675	0.565	0.615	0.116	0.160	3.085
Mauritius	Sub- Saharan Africa	6.04 9	0.059	0.90 5	66.701	0.867	-0.054	0.789	2.430	0.996	0.574	0.590	0.153	0.096	2.462
Latvia	Central and Eastern Europe	6.03	0.036	0.92 7	67.100	0.715	-0.162	0.800	2.430	1.047	0.587	0.405	0.082	0.089	2.536
Colombia	Latin America and Caribbean	6.01	0.061	0.84 7	68.001	0.837	-0.135	0.841	2.430	0.866	0.615	0.554	0.100	0.063	2.794
Hungary	Central and Eastern Europe	5.99 2	0.047	0.94	68.000	0.755	-0.186	0.876	2.430	1.083	0.615	0.454	0.067	0.040	2.432
Thailand	Southeast Asia	5.98 5	0.047	0.88 8	67.401	0.884	0.287	0.895	2.430	0.957	0.596	0.611	0.375	0.028	2.309
Nicaragu a	Latin America and Caribbean	5.97 2	0.083	0.86 4	67.657	0.836	0.020	0.664	2.430	0.904	0.604	0.553	0.201	0.176	2.841
Japan	East Asia	5.94 0	0.040	0.88 4	75.100	0.796	-0.258	0.638	2.430	0.949	0.838	0.504	0.020	0.192	2.048
Argentin a	Latin America and Caribbean	5.92 9	0.056	0.89	69.000	0.828	-0.182	0.834	2.430	0.980	0.646	0.544	0.069	0.067	2.461
Portugal	Western Europe	5.92 9	0.055	0.87 9	72.600	0.892	-0.244	0.887	2.430	0.939	0.760	0.621	0.029	0.033	2.225
Honduras	Latin America and Caribbean	5.91 9	0.082	0.81	67.300	0.857	0.081	0.809	2.430	0.787	0.593	0.578	0.241	0.083	2.934
Croatia	Central and Eastern Europe	5.88 2	0.048	0.92 4	70.799	0.754	-0.118	0.939	2.430	1.039	0.703	0.453	0.111	0.000	2.325
Philippin es	Southeast Asia	5.88 0	0.052	0.83 0	62.000	0.917	-0.097	0.742	2.430	0.828	0.426	0.651	0.125	0.126	2.872
South Korea	East Asia	5.84 5	0.042	0.79 9	73.900	0.672	-0.083	0.727	2.430	0.758	0.801	0.353	0.134	0.135	2.262
Peru	Latin America and Caribbean	5.84 0	0.075	0.83	68.250	0.822	-0.154	0.891	2.430	0.833	0.623	0.536	0.087	0.031	2.744

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Bosnia and Herzegov ina	Central and Eastern Europe	5.81 3	0.050	0.87	68.098	0.706	0.113	0.931	2.430	0.919	0.618	0.395	0.261	0.005	2.583
Moldova	Commonw ealth of Independe nt States	5.76 6	0.046	0.85 7	65.699	0.822	-0.079	0.918	2.430	0.888	0.542	0.536	0.137	0.013	2.665
Ecuador	Latin America and Caribbean	5.76 4	0.057	0.82	68.800	0.842	-0.124	0.843	2.430	0.806	0.640	0.560	0.107	0.062	2.653
Kyrgyzst an	Commonw ealth of Independe nt States	5.74 4	0.046	0.89	64.401	0.935	0.119	0.908	2.430	0.971	0.501	0.673	0.266	0.020	2.648
Greece	Western Europe	5.72 3	0.046	0.82 3	72.600	0.582	-0.288	0.823	2.430	0.811	0.760	0.243	0.000	0.074	2.561
Bolivia	Latin America and Caribbean	5.71 6	0.053	0.81	63.901	0.875	-0.077	0.839	2.430	0.782	0.486	0.600	0.138	0.064	2.805
Mongolia	East Asia	5.67 7	0.042	0.93 5	62.500	0.708	0.116	0.856	2.430	1.065	0.442	0.397	0.263	0.053	2.492
Paraguay	Latin America and Caribbean	5.65 3	0.092	0.89	65.900	0.876	0.028	0.882	2.430	0.970	0.549	0.602	0.206	0.037	2.306
Montene gro	Central and Eastern Europe	5.58 1	0.054	0.85 8	68.699	0.708	-0.034	0.812	2.430	0.891	0.637	0.397	0.166	0.081	2.254
Dominica n Republic	Latin America and Caribbean	5.54 5	0.071	0.85	66.102	0.860	-0.133	0.714	2.430	0.879	0.555	0.581	0.101	0.144	2.178
North Cyprus	Western Europe	5.53 6	0.051	0.82 0	73.898	0.795	0.012	0.626	2.430	0.806	0.801	0.503	0.196	0.200	1.653
Belarus	Commonw ealth of Independe nt States	5.53 4	0.047	0.91 0	66.253	0.650	-0.180	0.627	2.430	1.007	0.560	0.326	0.070	0.199	2.247
Russia	Commonw ealth of Independe nt States	5.47 7	0.033	0.90	64.703	0.718	-0.111	0.845	2.430	0.992	0.511	0.409	0.115	0.060	2.148
Hong Kong S.A.R. of China	East Asia	5.47 7	0.049	0.83 6	76.820	0.717	0.067	0.403	2.430	0.841	0.893	0.408	0.232	0.342	1.236
Tajikistan	Commonw ealth of Independe nt States	5.46 6	0.034	0.86	64.281	0.832	-0.056	0.553	2.430	0.895	0.498	0.548	0.152	0.247	2.619

Vietnam	Southeast Asia	5.41 1	0.039	0.85 0	68.034	0.940	-0.098	0.796	2.430	0.873	0.616	0.679	0.124	0.091	2.211
Libya	Middle East and North Africa	5.41 0	0.076	0.82 7	62.300	0.771	-0.087	0.667	2.430	0.821	0.435	0.474	0.131	0.174	2.331
Malaysia	Southeast Asia	5.38 4	0.049	0.81 7	67.102	0.895	0.125	0.839	2.430	0.797	0.587	0.624	0.270	0.064	1.784
Indonesia	Southeast Asia	5.34 5	0.056	0.81 1	62.236	0.873	0.542	0.867	2.430	0.786	0.433	0.598	0.541	0.046	1.987
Congo (Brazzavi lle)	Sub- Saharan Africa	5.34 2	0.097	0.63 6	58.221	0.695	-0.068	0.745	2.430	0.392	0.307	0.381	0.144	0.124	3.476
China	East Asia	5.33 9	0.029	0.81 1	69.593	0.904	-0.146	0.755	2.430	0.785	0.665	0.636	0.093	0.117	1.982
Ivory Coast	Sub- Saharan Africa	5.30 6	0.078	0.64 4	50.114	0.741	-0.016	0.794	2.430	0.409	0.052	0.438	0.177	0.092	3.469
Armenia	Commonw ealth of Independe nt States	5.28 3	0.058	0.79 9	67.055	0.825	-0.168	0.629	2.430	0.758	0.585	0.540	0.079	0.198	2.127
Nepal	South Asia	5.26 9	0.070	0.77 4	64.233	0.782	0.152	0.727	2.430	0.702	0.496	0.488	0.287	0.135	2.642
Bulgaria	Central and Eastern Europe	5.26 6	0.054	0.93 1	67.000	0.788	-0.096	0.932	2.430	1.055	0.583	0.494	0.125	0.005	1.823
Maldives	South Asia	5.19 8	0.072	0.91 3	70.600	0.854	0.024	0.825	2.430	1.015	0.697	0.575	0.204	0.073	1.520
Azerbaija n	Commonw ealth of Independe nt States	5.17 1	0.040	0.83 6	65.656	0.814	-0.223	0.506	2.430	0.841	0.541	0.526	0.043	0.276	1.919
Cameroo n	Sub- Saharan Africa	5.14 2	0.074	0.71 0	53.515	0.731	0.026	0.848	2.430	0.556	0.159	0.425	0.205	0.058	3.195
Senegal	Sub- Saharan Africa	5.13 2	0.068	0.71 0	59.802	0.695	-0.046	0.801	2.430	0.558	0.357	0.381	0.158	0.088	3.071
Albania	Central and Eastern Europe	5.11 7	0.059	0.69 7	68.999	0.785	-0.030	0.901	2.430	0.529	0.646	0.491	0.168	0.024	2.250
North Macedoni a	Central and Eastern Europe	5.10 1	0.051	0.80 5	65.474	0.751	0.038	0.905	2.430	0.772	0.535	0.450	0.212	0.022	2.042
Ghana	Sub- Saharan Africa	5.08 8	0.067	0.72 7	57.586	0.807	0.123	0.848	2.430	0.595	0.287	0.517	0.268	0.058	2.684

Niger	Sub-	5.07	0.102	0.64	53.780	0.806	0.018	0.693	2.430	0.402	0.167	0.516	0.200	0.157	3.470
	Saharan Africa	4		1											
Turkmen istan	Commonw ealth of Independe nt States	5.06 6	0.036	0.98 3	62.409	0.877	0.273	0.888	2.430	1.172	0.439	0.602	0.366	0.033	1.409
Gambia	Sub- Saharan Africa	5.05 1	0.089	0.69 0	55.160	0.697	0.424	0.746	2.430	0.511	0.210	0.384	0.465	0.123	2.990
Benin	Sub- Saharan Africa	5.04 5	0.073	0.48 9	54.713	0.757	-0.034	0.661	2.430	0.058	0.196	0.457	0.166	0.178	3.482
Laos	Southeast Asia	5.03 0	0.045	0.72 8	58.968	0.910	0.123	0.658	2.430	0.598	0.330	0.643	0.268	0.179	2.204
Banglade sh	South Asia	5.02 5	0.046	0.69 3	64.800	0.877	-0.041	0.682	2.430	0.520	0.514	0.603	0.161	0.164	2.427
Guinea	Sub- Saharan Africa	4.98 4	0.090	0.63 9	55.008	0.697	0.095	0.766	2.430	0.399	0.206	0.384	0.250	0.111	3.216
South Africa	Sub- Saharan Africa	4.95 6	0.060	0.86 0	56.904	0.749	-0.067	0.860	2.430	0.895	0.265	0.447	0.144	0.051	2.187
Turkey	Middle East and North Africa	4.94 8	0.046	0.82	67.199	0.576	-0.139	0.776	2.430	0.809	0.590	0.236	0.097	0.104	1.852
Pakistan	South Asia	4.93 4	0.068	0.65 1	58.709	0.726	0.098	0.787	2.430	0.423	0.322	0.418	0.252	0.097	2.784
Morocco	Middle East and North Africa	4.91 8	0.060	0.56 0	66.208	0.774	-0.236	0.801	2.430	0.219	0.558	0.477	0.034	0.088	2.749
Venezuel a	Latin America and Caribbean	4.89	0.064	0.86 1	66.700	0.615	-0.169	0.827	2.430	0.897	0.574	0.284	0.078	0.072	2.135
Georgia	Commonw ealth of Independe nt States	4.89 1	0.054	0.67 1	64.300	0.783	-0.238	0.655	2.430	0.470	0.498	0.488	0.032	0.181	2.191
Algeria	Middle East and North Africa	4.88 7	0.053	0.80	66.005	0.480	-0.067	0.752	2.430	0.765	0.552	0.119	0.144	0.120	2.242
Ukraine	Commonw ealth of Independe nt States	4.87 5	0.052	0.88	64.902	0.724	-0.011	0.924	2.430	0.958	0.517	0.417	0.181	0.010	1.813
Iraq	Middle East and North Africa	4.85 4	0.059	0.74 6	60.583	0.630	-0.053	0.875	2.430	0.638	0.381	0.302	0.153	0.041	2.429

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Gabon	Sub- Saharan Africa	4.85	0.075	0.77 6	59.962	0.731	-0.200	0.840	2.430	0.707	0.362	0.424	0.058	0.064	2.201
Burkina Faso	Sub- Saharan Africa	4.83 4	0.081	0.67	54.151	0.695	-0.009	0.748	2.430	0.472	0.179	0.381	0.182	0.122	3.133
Cambodi a	Southeast Asia	4.83 0	0.067	0.76 5	62.000	0.959	0.034	0.843	2.430	0.680	0.426	0.702	0.210	0.061	2.148
Mozambi que	Sub- Saharan Africa	4.79 4	0.103	0.74 4	54.706	0.882	0.061	0.684	2.430	0.634	0.196	0.608	0.228	0.163	2.783
Nigeria	Sub- Saharan Africa	4.75 9	0.052	0.74 0	50.102	0.737	0.037	0.878	2.430	0.625	0.051	0.433	0.212	0.039	2.736
Mali	Sub- Saharan Africa	4.72	0.082	0.72 4	51.969	0.697	-0.036	0.827	2.430	0.590	0.110	0.384	0.164	0.072	3.016
Iran	Middle East and North Africa	4.72 1	0.055	0.71	66.300	0.608	0.218	0.714	2.430	0.557	0.561	0.275	0.330	0.144	1.823
Uganda	Sub- Saharan Africa	4.63 6	0.073	0.78	56.101	0.709	0.122	0.855	2.430	0.718	0.240	0.398	0.267	0.054	2.596
Liberia	Sub- Saharan Africa	4.62 5	0.106	0.72 0	56.498	0.735	0.050	0.850	2.430	0.580	0.253	0.430	0.221	0.057	2.857
Kenya	Sub- Saharan Africa	4.60 7	0.072	0.68 8	60.704	0.779	0.287	0.825	2.430	0.508	0.385	0.483	0.375	0.073	2.180
Tunisia	Middle East and North Africa	4.59 6	0.058	0.69	67.201	0.656	-0.201	0.870	2.430	0.515	0.590	0.334	0.057	0.044	2.138
Lebanon	Middle East and North Africa	4.58 4	0.055	0.84 8	67.355	0.525	-0.073	0.898	2.430	0.868	0.595	0.175	0.140	0.026	1.736
Namibia	Sub- Saharan Africa	4.57 4	0.064	0.81 8	56.799	0.719	-0.149	0.847	2.430	0.801	0.262	0.411	0.091	0.059	2.068
Palestinia n Territorie s	Middle East and North Africa	4.51 7	0.067	0.82 6	62.250	0.653	-0.163	0.821	2.430	0.819	0.434	0.330	0.082	0.075	2.131
Myanmar	Southeast Asia	4.42 6	0.052	0.77 9	59.302	0.876	0.509	0.660	2.430	0.713	0.341	0.601	0.520	0.178	1.407
Jordan	Middle East and North Africa	4.39 5	0.062	0.76 7	67.000	0.755	-0.167	0.705	2.430	0.685	0.583	0.455	0.079	0.150	1.553

Chad	Sub- Saharan Africa	4.35 5	0.094	0.61 9	48.478	0.579	0.041	0.807	2.430	0.353	0.000	0.240	0.215	0.084	3.209
Sri Lanka	South Asia	4.32 5	0.066	0.82 7	67.299	0.841	0.079	0.863	2.430	0.820	0.593	0.559	0.239	0.049	1.075
Swazilan d	Sub- Saharan Africa	4.30 8	0.071	0.77 0	50.833	0.647	-0.185	0.708	2.430	0.693	0.074	0.323	0.067	0.147	2.155
Comoros	Sub- Saharan Africa	4.28 9	0.084	0.62 6	57.349	0.548	0.082	0.781	2.430	0.367	0.279	0.202	0.241	0.101	2.610
Egypt	Middle East and North Africa	4.28	0.045	0.75 0	61.998	0.749	-0.182	0.795	2.430	0.647	0.426	0.446	0.069	0.092	1.648
Ethiopia	Sub- Saharan Africa	4.27 5	0.051	0.76 4	59.000	0.752	0.082	0.761	2.430	0.679	0.331	0.451	0.241	0.114	2.089
Mauritan ia	Sub- Saharan Africa	4.22 7	0.070	0.79 5	57.161	0.561	-0.106	0.731	2.430	0.749	0.273	0.218	0.119	0.133	2.069
Madagasc ar	Sub- Saharan Africa	4.20 8	0.072	0.68 6	59.305	0.552	-0.005	0.803	2.430	0.503	0.341	0.207	0.185	0.087	2.620
Togo	Sub- Saharan Africa	4.10 7	0.077	0.56 9	54.914	0.619	0.032	0.772	2.430	0.239	0.203	0.289	0.209	0.107	2.806
Zambia	Sub- Saharan Africa	4.07	0.069	0.70 8	55.809	0.782	0.061	0.823	2.430	0.552	0.231	0.487	0.227	0.074	1.975
Sierra Leone	Sub- Saharan Africa	3.84 9	0.077	0.63 0	51.651	0.717	0.084	0.866	2.430	0.377	0.100	0.408	0.243	0.047	2.396
India	South Asia	3.81 9	0.026	0.60 3	60.633	0.893	0.089	0.774	2.430	0.316	0.383	0.622	0.246	0.106	1.405
Burundi	Sub- Saharan Africa	3.77 5	0.107	0.49 0	53.400	0.626	-0.024	0.607	2.430	0.062	0.155	0.298	0.172	0.212	2.876
Yemen	Middle East and North Africa	3.65 8	0.070	0.83	57.122	0.602	-0.147	0.800	2.430	0.831	0.272	0.268	0.092	0.089	1.776
Tanzania	Sub- Saharan Africa	3.62 3	0.071	0.70 2	57.999	0.833	0.183	0.577	2.430	0.540	0.300	0.549	0.307	0.231	1.263
Haiti	Latin America and Caribbean	3.61 5	0.173	0.54	55.700	0.593	0.422	0.721	2.430	0.173	0.227	0.257	0.463	0.139	2.060
Malawi	Sub- Saharan Africa	3.60	0.092	0.53 7	57.948	0.780	0.038	0.729	2.430	0.168	0.298	0.484	0.213	0.134	2.190

Lesotho	Sub- Saharan Africa	3.51	0.120	0.78 7	48.700	0.715	-0.131	0.915	2.430	0.731	0.007	0.405	0.103	0.015	1.800
Botswana	Sub- Saharan Africa	3.46 7	0.074	0.78 4	59.269	0.824	-0.246	0.801	2.430	0.724	0.340	0.539	0.027	0.088	0.648
Rwanda	Sub- Saharan Africa	3.41 5	0.068	0.55 2	61.400	0.897	0.061	0.167	2.430	0.202	0.407	0.627	0.227	0.493	1.095
Zimbabw e	Sub- Saharan Africa	3.14 5	0.058	0.75 0	56.201	0.677	-0.047	0.821	2.430	0.649	0.243	0.359	0.157	0.075	1.205
Afghanist an	South Asia	2.52 3	0.038	0.46 3	52.493	0.382	-0.102	0.924	2.430	0.000	0.126	0.000	0.122	0.010	1.895