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Molly Mingus

Department of Economics, University of Northern Iowa

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The Impacts of Educational, Environmental and Economic Factors on the Happiness Index Score of a Country

Molly Mingus
Economics
University of Northern Iowa

Abstract

In this paper I analyze the impacts of educational, environmental and economic factors on the Happiness Index Score of a Country through a linear regression model. By using the most updated data for 86 countries, I was able to create a well-rounded model of happiness that includes additional variables not previously used in happiness research. This model finds a positive relationship between the Percentage of a Population in Tertiary School and happiness. A negative relationship that is discovered in the model shows that there is evidence that an increase in a country's Infant Mortality Rate has a negative effect on the Happiness Index Score. Lastly, the model finds that there is a positive relationship between a country's Gross Domestic Product per Capita and happiness which is consistent with results of other studies. Overall, this paper shows that there are many factors that can impact the happiness score of a country.

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The Impacts of Educational, Environmental and Economic Factors on the Happiness Index Score of a Country

INTRODUCTION

If you were to look up the definition of happiness in the Merriam-Webster Dictionary, you would find that happiness is “a state of well-being and contentment”. However, if you were to ask a room full of people what it meant to them to be happy, they would each tell you something different. Many would say that their idea of happiness would be to have wealth or to be famous. Perhaps to some it would be to have a successful career or to be able to provide for their children. Every individual has their own definition of what it means to content and every person has a different idea of their own state of well-being and happiness.

Many studies have been done in an attempt to discover what it is that truly makes someone happy. One of the most influential and successful studies was the Harvard Study of Adult Development that tracked the same 724 men for over 75 years to discover the very question, “What is it that makes you happy?” (HSGS, 2015). This study not only looked at factors that we often relate to happiness like income and career, but it also took a look at their personal lives. Surprisingly enough, after years of studying these men the director of research Robert Waldinger was able to conclude that it is good relationships that keep us happy (TED Talk, Waldinger, 2015).

Other studies such as the World Happiness Report attempt to measure the happiness of a country using a ranking system called the Happiness Index Score. In this study, the focus of the survey questions is on regional and global issues such as GDP, life expectancy, and corruption. This report is released annually and then used by the United Nations to determine which countries are most fit to pursue sustainability goals.

Both of these studies are fascinating approaches to understanding and measuring happiness with two different views. The Harvard Study of Adult Development focuses on mental and social health’s effects on happiness while the World Happiness Report looks at regional and global issues’ effects on happiness. If there is one thing we can gather from these studies, it is that there are many different factors that can affect happiness.

In this paper I attempt to not only answer the question “What is it that makes us happy?” but I also want to answer the question “What affects our happiness the most?” In order to answer

both of these questions, I created a model that shows the impacts of a variety of educational, environmental and economic factors on the Happiness Index Score of a country. These variables look at perceived happiness of a country from many directions. Many of which are not currently used in models today.

LITERATURE REVIEW

An article in *World Economics* written by Professor Carol Graham at the University of Maryland (Graham, 2005) argues that there is much more to happiness than simply quantitative measures that constrain a person's perceived happiness to a single number such as income. How can we assume that an individual is unhappy because their income is lower than average or because they are unemployed? According to Graham, "people have different preferences for material and non-material goods." and assuming that a generally low income causes an individual to be unhappy ignores these differences in preferences. A new area of study, the Economics of Happiness aims to look at happiness through expressed preferences of the people (Graham, 2005).

In order to do this, the structure of happiness surveys is being changed to allow the surveyed individual to rank the importance of factors to their happiness. The reason behind this is to capture welfare affects that may occur when a country has limited opportunities and resources (Graham, 2005). These affect things such as inequality and the inability to make a change. Although it is important to view happiness based off of income and GDP, a developing country with no hope for growth in those areas may be focusing on maximizing utility in other aspects of their life. The goal from these surveys is to examine happiness through a mixture of quantitative measures and preferences.

This area of study, The Economics of Happiness has been supported through research done by Richard Easterlin who founded the Easterlin Paradox. Easterlin states that, "at a point in time happiness varies directly with income both among and within nations, but over time happiness does not trend upward as income continues to grow." (Easterlin, 1974). The results from these studies found that "even among the less happy, poorer countries, there is not a clear relationship between average income and happiness levels, suggesting that many other factors- including cultural traits- are at play (Graham, 2005). These studies show that the preferences among us may determine just how much quantitative measures are affecting our happiness. If our

basic needs as an individual are met, our happiness is likely influenced by opportunities and aspirations (Graham, 2005).

DATA

The data set that I used in this paper is one that I created by gathering a variety of different data sets from various resources. Due to the assortment of variables I chose for my model, I was unable to find a singular data set from one source. The following paragraphs summarize the sources of my data and how I was able to build the data set used in this paper.

The World Happiness Report is an annual report that surveys residents of 156 countries around the world and then ranks these countries based on their perceived happiness (World Happiness Report, 2019). This report uses multiple methodologies to compute the final Happiness Index Score. The first methodology is what is called the Gallup World Poll. The Gallup World Poll is a surveying system that asks the surveyed 100 or more questions related towards global issues (Gallup, 2019). This survey is conducted on an annual basis all over the world and includes 99% of the population. Although there are many sections to the Gallup World Poll, the World Happiness Report looks solely at the questions regarding the surveyed individuals' main life. (World Happiness Report, 2019). This section of the survey asks individuals to rank their happiness with their lives using a ladder method called the Cantril Ladder (Hraba, 2016). After gathering these responses, they are weighted based on a variety of factors related to global issues. Each year these factors may vary based on that year's global issue focus, but many of the factors remain the same. A number is then computed and each country is given a ranking between one and ten.

Due to many of the other variables I chose in my model not having the most recent data from 2019, I chose to use the Happiness Index Scores from the year 2017 (World Happiness Report, 2017). By doing so, I was able to extract data from the years ranging between 2015-2017 for the independent variables. This creates consistency in my data set and equal representation.

A majority of the independent variables came from the widely used data source The World Bank's Data Bank. These variables included Population, Infant Mortality Rate, and Percentage of the Population in Tertiary School, GDP and Unemployment Rate. The World Bank has a tool called Databank in which you can extract time series data based off of many

different indicators such as environmental indicators and education indicators (The World Bank, 2019). By using this tool, I was able to extract data sets for the stated variables.

The variable Average Watts of Electricity per Person/per Capita was compiled using data from The World Bank's Data Bank, as well as an equation to calculate the wattage use per person. The original data extracted was electric power consumption (kWh per capita) for each country for the year 2017. I then wanted to create a variable that represented the average electrical power use per person in watts. In order to create this variable, I used the following equations to transform my data from kWh to watts.

Converts kWh into watts:

$$1 \text{ kWh/yr} = 1,000 \text{ Wh}/(365 \times 24)h = 0.11408 \text{ Watt}$$

Calculates average watts per person/per year:

$$\text{Total population electricity consumption [in kWh/yr]} * 0.114077116 / \text{population.}$$

Conversion from kilowatts to watts:

$$1kW = 1000w$$

Equations pulled from the following sources:

https://www.rapidtables.com/convert/power/kW_to_Watt.html

https://en.wikipedia.org/wiki/List_of_countries_by_electricity_consumption

The final source for data that was used to create my data set was derived from the 2017 Index of Economic Freedom by The Heritage Foundation. This index is developed annually to rank a country's economic freedom on a score of 1 to 100. In this index, there are twelve different categories of freedom that are equally weighted to create a singular index number (Weidman, 2019). Some of these categories include financial freedom and labor freedom. This Index spans across the world to 186 countries and represents a large percentage of the population. I chose to use the overall economic freedom index score in my data set.

After gathering data from these various sources for all of my variables, I then combined the data into a singular data set. Since I was pulling data from many different sources, a majority of the smaller countries had missing values. I chose to delete all countries that did not have a value for every variable. My original data set comprised of 186 countries across the world. Due to the deletion of countries with missing values, my final data set comprised of 86 countries.

VARIABLES

Happiness Index Score: The Dependent Variable

H_i : *The Happiness Index Score*

The Happiness Index Score is derived from the World Happiness Report from 2017. This score is a value between one and ten that represents *country_i's* rank on their level of perceived happiness, with a maximum value of ten. One being the lowest level of happiness, and ten being the happiest. All countries are scored the same.

The Independent Variables

EP_i : *Average Electrical Power Use Per Person/Capita*

The Average Electrical Power Use per Person/per Capita is the average number of watts of electrical power used by an individual in *country_i* in *year_i* holding all else equal. In this data set the year used is 2017. The average is derived by dividing the total electrical power usage in a *country_i* in *year_i* by the population of *country_i* in *year_i*. A higher value means more electrical power usage in the country per year.

IMR_i : *Infant Mortality Rate*

The Infant Mortality Rate is the number of infant deaths per 1,000 live births in *country_i* in *year_i* holding all else equal. The value for this variable is a numerical value rather than a percentage. A country with a higher value means more infants die at live childbirth, with a maximum value of 1,000.

GDP_i : *Gross Domestic Product per Capita*

Gross Domestic Product per Capita is formulated by dividing *country_i's* gross domestic product in *year_i* by the population of *country_i* in *year_i* holding all else equal. It is a way to measure the economic output compared to the population and is a good measurement of a country's standard of living (Amadeo, 2019). There is no maximum value for this variable.

U_i : *Unemployment Rate*

Unemployment rate is the share of the labor force in *country_i* that does not have a job in *year_i* holding all else equal. The labor force of *country_i* consists of those who are employed and unemployed. This variable is expressed as a percentage with a minimum percentage of 0.00% and a maximum of 100%. This rate is determined by the Bureau of Labor Statistics and is updated on a monthly basis. Due to various ways to calculate the unemployment rate, there is

speculation that it does not accurately represent the market (Chappelow, 2019). For this data set the official unemployment rate method of calculation U-3 was used. The U-3 method is shown below.

$$U - 3 = \frac{\text{Unemployed}}{\text{Labor Force}}$$

<https://www.investopedia.com/terms/u/unemploymentrate.asp>

EF_i : Economic Freedom Score

The Economic Freedom score is derived from the 2017 Index of Economic Freedom by The Heritage Foundation. The Economic Freedom Score is a value between 1 and 100 that ranks the overall degree of economic freedom of *country_i* in *year_i* holding all else equal. There is evidence of a relationship between a higher economic freedom score and an enjoyment of income (Kenton, 2019).

T_i : School Enrollment in Tertiary School (% Gross)

This variable represents total number (regardless of age) of those enrolled in tertiary school of *country_i* in *year_i* divided by the population of the age group that corresponds to the tertiary school level of *country_i* in *year_i* multiplied by 100 (UNESCO, 2019). It is expressed as a percentage with minimum of 0.00% and a maximum of 100%. According to The World Bank, tertiary school is defined as “all post-secondary education, including both public and private universities, colleges, technical training institutes, and vocational schools” (2017).

Table 1: Summary Statistics of Variables

	Observations	Mean	Standard Deviation	Minimum	Maximum
The Happiness Index Score	86	5.635	1.18	2.91	7.537
Average Electrical Power Use Per Person/Capita	86	546.326	785.266	4	5777
Infant Mortality Rate	86	15.54	16.339	1.5	68.8

Gross Domestic Product per Capita	86	20153.98	23377.47	293.01	104498.7
Unemployment Rate	86	7.066	5.25	.14	27.327
Economic Freedom Score	86	64.974	9.391	46.5	88.6
School Enrollment in Tertiary School (% Gross)	86	50.105	29.381	3.733	136.603

MODEL

I will be using a linear regression model to examine the relationships between the measured level of perceived happiness, H_i and the above variables which represent economic, environmental, and educational factors that may have a significant impact on the Happiness Index Score of a country. The following equation was used to run the linear regression.

$$(1) \quad H_i = \beta_0 + \beta_1 EP_i - \beta_2 IMR_i + \beta_3 GDP_i - \beta_4 U_i + \beta_5 EF_i + \beta_6 T_i$$

Typically, the research that has been done to analyze happiness focuses on the level of income in the household or solely economic factors without considering the thousands of other areas of life that may truly impact a person or country's happiness.

When building this model, I knew that happiness has many more directions to it, just as Harvard's Adult Study of Human Development proved to show. To assume that an entire country's happiness is based off of one, or even a few variables is irrational. I felt it was important to recognize the impact of the level of development of a country by using variables that have proven to have relationship with development while also considering variables that have impacts on our mental and social health.

EP_i , Electrical Use per Person/per Capita is an environmental variable that was added to the model last. The purpose behind including this in the model was to provide evidence of our society's involved relationship with technology and electricity. As most nations turn to electronics and smartphones as storage device for their lives, this variable is a vital piece to the equation. I chose a positive sign for this variable because there is evidence of a significant

positive relationship between technology and its role in expanding human development (Ranis, 2011).

IMR_i Infant Mortality Rate is a variable that was included to account for two things. The first reason I included Infant Mortality Rate is that it represents the development state of a country. Studies have been done to show that there is an inverse relationship between infant mortality rate and socioeconomic development (DaVanzo, 1988). For example, developing countries with low access to medical centers and medical practices would typically have a high infant mortality rate. I also recognized the negative effects on mental and social health that losing children can have on an individual. Due to these inverse relationships I chose to give this variable a negative sign.

GDP_i Gross Domestic Product per Capita is a variable that is used in almost every study of happiness such as this one. I chose to include this variable with a positive sign to provide consistency among my model compared to other models.

U_i Unemployment rate is often overlooked in studies on happiness because variables such as income are included. However, studies show that unemployment rate has a negative impact on happiness when income is held constant (Ohtake, 2012). I chose to make this a negative variable because in theory a country where more of the population is unemployed, would experience negative impacts their happiness. Issues of multi-collinearity could occur in this model due to Gross Domestic Product also being correlated to Unemployment Rate.

EF_i Economic Freedom is an important variable to include because it is representative of newer measures of ranking a country as it began in 1995. Including updated models of measure and data in this equation provides it with accuracy and innovation. After reviewing the method behind Heritage Foundation's Economic Freedom, I found that a higher index represents a country positively.

Lastly, T_i School Enrollment in Tertiary School (% Gross) is a variable that I have not found studies on. Considering there is a wide variation in the values for this variable, I was curious to see the significance it would have on the Happiness Index Score. I chose a positive sign for this variable in the model because in theory there would be a positive relationship between the percentages of the population in tertiary school and the overall social and economic development of the country. However, I believe some issues could arise because some countries may have more access to tertiary schools than others which creates a bias.

RESULTS

The following equation was ran at a 95% confidence interval with 85 degrees of freedom to produce the results shown in *Table 2 Regression Results*.

Table 2: Linear Regression Results

H_i	Coef.	Std. Error	t	P>t	95% Conf. Interval	
EP_i	.0000279	.0001073	0.26	0.795	-.0001856	.0002415
IMR_i	-.0243417	.0065765	-3.70	0.000	-.0374318	-.0112515
GDP_i	.0000239	4.48e-06	5.34	0.000	.000015	.0000328
U_i	-.017889	.0128928	-1.39	0.169	-.0435515	.0077735
EF_i	-.0046393	.010126	-0.46	0.648	-.0247945	.0155159
T_i	.0088019	.0035222	2.50	0.015	.0017912	.0158126
Const.	5.502554	.6865649	8.01	0.000	4.135981	6.869128
R^2	0.7722					
Prob. > F	0.0000					

The data was also tested for heteroscedasticity and multicollinearity. Heteroscedasticity was tested using both the White test and the Bruesch-Pagan test. White's test resulted in a p-value of 0.3337 and the Breusch- Pagan resulted in a p-value of 0.2293. Due to the p-value for each test being insignificant we can assume there is no evidence of heteroscedasticity. To test for multicollinearity, I used the Variance Inflation Factor Method which resulted in a VIF value of 2.24. Since VIF is below 10 there is no evidence of near perfect multicollinearity. Since there is no evidence of heteroscedasticity, there is no need to standardize the data and run a regression with robust standard errors.

Although six independent variables were included in this model of happiness, based off of regression results we find that only three have a significant impact on the Happiness Index Score of a country. Infant Mortality Rate has a significant negative relationship with the Happiness Index Score of a country. With a p-value of 0.000 and a coefficient of -.0243417, this

model shows that for every one percent increase in Infant Mortality Rate, that country's happiness index score can be expected to decrease by 0.0243 holding other variables constant. Considering the maximum Happiness Index Score is 10, this slight decrease could strongly impact a country's ranking.

Gross Domestic Product per Capita was included to provide consistency with other models of happiness. Regression results show that GDP with a p-value of 0.000 and an estimated coefficient of 0.0000239 has a positive relationship with happiness. Compared to other studies on GDP's impact on happiness (Gropper, Lawson, Thorne Jr, 2011) this model's results are consistent.

Percentage of the Population in Tertiary School was included to represent the impacts that institutions and education may have on happiness. I was pleased to see that this variable with a p-value of 0.015 and an estimated coefficient of 0.0088019 has a significant positive relationship with the Happiness Index Score. This result could represent a few things. Perhaps it represents the positive relationship with education on an individual's wellbeing. It could also represent the positive impact that education has on the output of a country (GDP) which also has a positive relationship with happiness. However, there is still the possibility of bias in this variable which could impact the significance of this variable.

Environmental variables that were included such as Electrical Use per Person per Capita showed to have little significance on the happiness of a country. Due to the extreme variation in this variable value in developing countries versus developed countries, I could also see a possible bias occurring. After running this regression model again without this variable included, the R^2 remains unchanged. Due to this and the possible bias, I feel that this variable could be omitted.

Although regression results were consistent with my assumption that Unemployment Rate has a negative relationship with happiness, I was surprised to see that the relationship was not significant. Some of this may be a consequence from including GDP and Economic Freedom Index in this model which could have a potential correlation with Unemployment Rate and diminish the impacts of this independent variable. We could assume that GDP and Economic Freedom account for variables such as this and omit it from the model however we would then be assuming that Unemployment Rate only affects economic factors of a country.

Results from this model show that the Economic Freedom Index of a country has an insignificant negative relationship with happiness. This result was contradictory to my

expectations as well as inconsistent with a study done by Gropper, Lawson and Thorne in 2011 that showed evidence of a positive relationship between the Economic Freedom Index of a country and happiness. Possible explanation for this could be that by including GDP and Unemployment Rate which are both variables that reflect the economic development of a country, the impacts of the Economic Freedom Index were diminished as well.

SUMMARY

In every model there is a possibility of missing important variables that could significantly impact the outcome. However, by including educational, environmental and economic variables that cover many important aspects of a country's happiness we can assume that any possible omitted variables were accounted for. After developing a model with updated data and unique variables to analyze happiness, the results show that there is more to a country's happiness than simply economic factors. These results capture the impacts institutions such as schools and hospitals could have on happiness. Could a developing country with few medical centers and schools, and therefore a high Infant Mortality Rate and low Percentage of the Population in Tertiary School be the reason their Happiness Index Score is low? The results appear to show evidence of that. The results support the recent studies that GDP does have a significant positive impact on happiness, but will this impact diminish if variables such as Average Electrical Power Use becomes significant? This paper shows the importance of looking at happiness from all aspects, while recognizing the differences of each country and market and how it impacts their people.

REFERENCES

- Amadeo, Kimberly. "Why the World's Largest Economies Aren't the Richest." *The Balance*, The Balance, 8 Nov. 2019, <https://www.thebalance.com/gdp-per-capita-formula-u-s-compared-to-highest-and-lowest-3305848>.
- Chappelow, Jim. "Unemployment Rate Definition." *Investopedia*, Investopedia, 18 Nov. 2019, <https://www.investopedia.com/terms/u/unemploymentrate.asp>.
- "DataBank Home." *DataBank*, DataBank by World Bank, <https://databank.worldbank.org/home>.
- DaVanzo, Julie, et al. "Infant Mortality in Economic Development." *RAND Corporation*, 1990, https://www.rand.org/pubs/research_briefs/RB5002.html.

- Easterline, Richard. "Does Economic Growth Improve the Human Lot? Some Empirical Evidence." 1974, pp. 1–37., <http://graphics8.nytimes.com/images/2008/04/16/business/Easterlin1974.pdf>.
- Graham, Carol. "The Economics of Happiness." *World Economics*, vol. 6, no. 3, Sept. 2005, pp. 41–55.
- Gropper, Daniel, et al. "Economic Freedom and Happiness." *CATO Journal*, vol. 31, no. 2, 2011, pp. 237–255.
- "Happiness." *Merriam-Webster*, Merriam-Webster, <https://www.merriam-webster.com/dictionary/happiness>.
- "How Does the Gallup World Poll Work?" *Gallup*, Gallup Inc., <https://www.gallup.com/178667/gallup-world-poll-work.aspx>.
- Hrala, Josh. "The World Happiness Index 2016 Just Ranked The Happiest Countries on Earth." *ScienceAlert*, Science Alert, 17 Mar. 2016, <https://www.sciencealert.com/the-world-happiness-index-2016-just-ranked-the-happiest-countries-on-earth>.
- Kenton, Will. "Index of Economic Freedom." *Investopedia*, Investopedia, 18 Nov. 2019, <https://www.investopedia.com/terms/i/index-of-economic-freedom.asp>.
- Ohtake, Fumio. "Unemployment and Happiness." *Japan Labor Review*, vol. 9, no. 2, 2012, pp. 59–74., https://www.jil.go.jp/english/JLR/documents/2012/JLR34_ohtake.pdf.
- Ranis, Gustav. "Technology and Human Development." *Center Discussion Paper*, vol. 1004, Sept. 2011, pp. 1–22., http://www.econ.yale.edu/growth_pdf/cdp1004.pdf.
- "Tertiary Education." *World Bank*, World Bank, <https://www.worldbank.org/en/topic/tertiaryeducation>.
- Waldinger, Robert. *TED*, TED , Nov. 2015, https://www.ted.com/talks/robert_waldinger_what_makes_a_good_life_lessons_from_the_longest_study_on_happiness?referrer=playlist-what_makes_you_happy.
- Waldinger, Robert. "About Happiness." *Robert Waldinger*, 2019, <https://robertwaldinger.com/about-happiness/>.
- Weidman, Jim. "About The Index." *2019 Index of Economic Freedom | The Heritage Foundation*, The Heritage Foundation, 2019, <https://www.heritage.org/index/about>.

APPENDIX

The following sources were used to create the data set below:

World Bank DataBank- Statistics provided by UNESCO Institute for Statistics

Electric power consumption (kWh per capita) for the years 2016 and 2017

<https://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC?view=chart>

Population, total for the year 2017

<https://data.worldbank.org/indicator/SP.POP.TOTL?view=chart>

Mortality rate, infant (per 1,000 live births) for years 2016 and 2017

<https://data.worldbank.org/indicator/SP.DYN.IMRT.IN>

School enrollment, tertiary (% gross) for the years 2016 and 2017

<https://data.worldbank.org/indicator/SE.TER.ENRR>

GDP per capita (current US\$) for the year 2017

https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?name_desc=false

Unemployment, total (% of total labor force) (modeled ILO estimate)

<https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>

The Heritage Foundation’s Economic Freedom Index for the year 2017

<https://www.heritage.org/index/explore?view=by-region-country-year&u=637096856133245662>

The World Happiness Report- 2017 Happiness Index

<https://worldhappiness.report/ed/2017/>

Appendix: Data set used in the model

Country	H	EP	IMR	GDP	U	EF	T
Albania	4.64	292	8	4532.89	13.75	64.4	57.38
Algeria	5.87	138	20.6	4048.29	12.00	46.5	47.65
Angola	3.80	45	53.4	4095.81	7.14	48.5	9.34
Argentina	6.60	301	9.3	14591.86	8.35	50.4	89.96
Armenia	4.38	190	11.6	3914.50	17.83	70.3	52.25
Australia	7.28	1112	3.1	54093.60	5.59	81	113.14
Austria	7.01	913	2.9	47380.83	5.50	72.3	85.06

Azerbaijan	5.23	231	20.4	4147.09	5.00	63.6	27.07
Bahrain	6.09	2069	6.2	23715.48	0.95	68.5	47.15
Belarus	5.57	393	2.7	5761.75	5.65	58.6	88.45
Belgium	6.89	810	3	43507.24	7.09	67.8	79.66
Belize	5.96	129	11.8	4956.81	9.00	58.6	24.66
Benin	3.66	10	61.9	827.43	2.18	59.2	12.27
Botswana	3.77	191	30.8	7893.68	17.63	70.1	24.86
Brazil	6.64	287	13.2	9880.95	12.83	52.9	51.34
Bulgaria	4.71	495	6.2	8228.01	6.16	67.9	71.25
Burkina Faso	4.03	7	50.4	642.04	6.01	59.6	6.00
Burundi	2.90	4	42.4	293.01	1.50	53.2	6.05
Cambodia	4.17	29	25.1	1385.26	1.06	59.5	13.13
Cameroon	4.70	28	52.2	1421.59	3.36	51.8	12.76
Canada	7.32	1704	4.4	45069.93	6.34	78.5	68.92
Chile	6.65	426	6.3	15037.35	6.96	76.5	88.46
China	5.27	510	7.9	8759.04	4.40	57.4	49.07
Colombia	6.36	145	12.6	6375.93	8.87	69.7	56.43
Croatia	5.29	449	4	13383.68	11.21	59.4	66.53
Czech Republic	6.61	643	2.6	20379.90	2.89	73.3	64.08
Denmark	7.52	653	3.6	57218.85	5.74	75.1	80.62
Dominican Republic	5.23	162	24.8	7222.55	5.83	62.9	59.92
Estonia	5.61	743	2.2	20200.38	5.76	79.1	69.64
Finland	7.47	1681	1.5	45809.97	8.64	74	88.20
France	6.44	736	3.4	38679.13	9.40	63.3	65.63
Georgia	4.29	227	8.9	4045.42	13.93	76	56.81
Germany	6.95	753	3.2	44681.08	3.75	73.8	70.25
Ghana	4.12	39	36.1	2025.89	6.63	56.2	16.01
Greece	5.23	561	3.7	18883.46	21.49	55	136.60
Iceland	7.50	5777	1.6	71314.77	2.74	74.4	71.85
India	4.32	128	31.5	1981.50	2.56	52.6	27.44

Indonesia	5.26	117	21.9	3836.91	4.18	61.9	36.44
Ireland	6.98	576	3.2	69649.88	6.71	76.7	77.78
Israel	7.21	835	3	40543.58	4.22	69.7	63.35
Italy	5.96	535	2.7	32155.21	11.21	62.5	61.93
Jordan	5.34	223	14.3	4168.64	14.88	66.7	31.14
Kazakhstan	5.82	565	9.2	9030.32	4.90	69	50.15
Kenya	4.55	18	31.8	1568.20	9.29	53.5	11.46
Kuwait	6.11	2176	6.9	29474.54	2.00	65.1	55.36
Latvia	5.85	394	3.6	15684.56	8.72	74.8	88.06
Lesotho	3.81	46	68.8	1232.79	23.61	53.9	10.76
Lithuania	5.90	395	3.6	16809.65	7.07	75.8	72.42
Luxembourg	6.86	1215	2	104498.74	5.52	75.9	19.15
Madagascar	3.64	6	39.1	448.40	1.67	57.4	5.28
Malta	6.53	549	6.1	27241.09	4.57	67.7	48.60
Mauritania	4.29	24	52.8	1161.79	10.28	54.4	5.00
Mauritius	5.63	220	12.9	10484.91	6.75	74.7	40.60
Mexico	6.58	220	11.6	9281.10	3.42	63.6	40.23
Moldova	5.84	139	13.8	2724.49	4.10	58	41.08
Mongolia	4.95	210	14.6	3671.95	6.36	54.8	64.16
Montenegro	5.24	495	2.5	7784.07	16.07	62	58.19
Morocco	5.24	98	20.1	3036.17	9.05	61.5	33.78
Nepal	4.96	15	27.6	900.57	1.25	55.1	11.59
Netherlands	7.38	724	3.3	48554.99	4.84	75.8	84.98
New Zealand	7.31	1020	4.8	42260.13	4.70	83.7	82.03
Niger	4.03	7	49.1	375.87	0.28	50.8	3.73
Norway	7.54	2740	2.1	75704.25	4.16	74	81.99
Peru	5.72	144	11.5	6700.81	3.46	68.9	70.74
Philippines	5.43	101	22.9	2981.93	2.55	65.6	35.48
Poland	5.97	420	3.9	13861.05	4.89	68.3	67.83
Portugal	5.20	484	3.1	21291.43	8.87	62.6	63.94

Qatar	6.38	1718	6.1	61264.40	0.14	73.1	16.63
Romania	5.82	253	6.6	10792.96	4.93	69.7	48.24
Rwanda	3.47	4	28.2	762.50	0.95	67.6	7.37
Saudi Arabia	6.34	1102	6.4	20803.74	5.89	64.4	69.70
Senegal	4.53	23	32.8	1367.22	6.44	55.9	11.51
Singapore	6.57	931	2.2	60297.79	3.91	88.6	84.79
Slovenia	5.76	750	1.8	23449.57	6.56	59.2	78.59
South Africa	4.83	445	29.6	6127.46	27.33	62.3	22.37
Spain	6.40	550	2.6	28208.26	17.22	63.6	88.85
Sri Lanka	4.44	56	6.7	4104.63	4.18	57.4	18.96
Sweden	7.28	30	2.2	53253.48	6.72	74.9	66.99
Switzerland	7.49	809	3.7	80333.44	4.80	81.5	59.56
Tajikistan	5.04	164	31.3	806.04	10.74	58.2	31.26
Togo	3.49	16	48.7	619.07	1.66	53.2	13.06
Tunisia	4.80	153	14.7	3494.32	15.38	55.7	32.15
United Kingdom	6.71	547	3.7	39932.06	4.34	76.4	60.00
United States	6.99	1377	5.7	59927.93	4.36	75.1	88.17
Uzbekistan	5.97	185	20.2	1826.57	4.97	52.3	9.18
Vietnam	5.07	149	16.9	2365.62	1.89	52.4	28.54

The following sources were used to create the data set above:

World Bank DataBank- Statistics provided by UNESCO Institute for Statistics

Electric power consumption (kWh per capita) for the years 2016 and 2017

<https://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC?view=chart>

Population, total for the year 2017

<https://data.worldbank.org/indicator/SP.POP.TOTL?view=chart>

Mortality rate, infant (per 1,000 live births) for years 2016 and 2017

<https://data.worldbank.org/indicator/SP.DYN.IMRT.IN>

School enrollment, tertiary (% gross) for the years 2016 and 2017

<https://data.worldbank.org/indicator/SE.TER.ENRR>

GDP per capita (current US\$) for the year 2017

https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?name_desc=false

Unemployment, total (% of total labor force) (modeled ILO estimate)

<https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>

The Heritage Foundation's Economic Freedom Index for the year 2017

<https://www.heritage.org/index/explore?view=by-region-country-year&u=637096856133245662>

The World Happiness Report- 2017 Happiness Index

<https://worldhappiness.report/ed/2017/>