

# 6.1: Sourcing Open Data

## 1. World Happiness Report 2024

### **Data Source:**

These datasets were taken from the World Happiness Report 2024. It includes the years from 2005 till 2024. The World Happiness Report is a partnership of Gallup, the Oxford Wellbeing Research Centre, the UN Sustainable Development Solutions Network, and the WHR's Editorial Board. The report is produced under the editorial control of the WHR Editorial Board. From 2024, the World Happiness Report is a publication of the Wellbeing Research Centre at the University of Oxford, UK.<sup>1</sup>

### **Data Collection:**

The data collection is from different places. To have a more clearer and detailed look, please have a look here: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://happiness-report.s3.amazonaws.com/2024/Ch2+Appendix.pdf> .

### **Data Contents:**

The Report is spanning from 2005 to 2024 and has vital variables such as Country name, year, life ladder and other continuous variables.

The survey measure of SWB is from the February 15, 2024 release of the Gallup World Poll (GWP) covering years from 2005/06 to 2023. Unless stated otherwise, it is the national average response to the question of life evaluations. The English wording of the question is "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?" This measure is also referred to as Cantril life ladder, or just life ladder in our analysis.<sup>2</sup>

### **Data Relevance:**

The dataset is relevant for numerous reasons. First, despite its limitation, the dataset provides valuable insights for policymakers to understand the factors influencing happiness within a country. Second, the dataset allow for comparisons between countries which allows to identify trends and patterns in happiness levels. Finally, the data set raises awareness about the importance of happiness and well-being as essential components of human development.

### **Data Limitations and Ethics:**

There are a couple of limitations with this data set. First of all, happiness is a subjective measure and can vary greatly based on cultural, societal, and individual differences. The happiness scored provided in the data set may not capture the full spectrum of the individual experiences within a country. Second of all, there might be data accuracy problem as the data comes from surveys. Finally, not all countries may have

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<sup>1</sup> Source: <https://worldhappiness.report/about/>, accessed on 23rd Apr 2024.

<sup>2</sup> Source: <https://worldhappiness.report/about/>, page 1, accessed on 23rd Apr 2024.

comprehensive data available for all the factors included in the report which could create biases.

### Data Choice:

I chose this data because it is very interesting to me to see the happiness results of the World by countries and overtime. Also, I think with this analysis, I will gain some great insights about the measurement of happiness and how they came to the results.

## 2. Data Profile

### Data Shape:

2363 rows, 11 columns.

### Data Consistency:

```
Country name      0
year              0
Life Ladder       0
Log GDP per capita 28
Social support    13
Healthy life expectancy at birth 63
Freedom to make life choices 36
Generosity        81
Perceptions of corruption 125
Positive affect   24
Negative affect   16
dtype: int64
```

We have some countries that have data for just one or two years, and we have some years with just 27 countries.

The analysis will be not accurate if we compare a country that has data for just one year and a country with data for 18 years for example. Therefore I chose to exclude and deleted the countries that are represented 1-3 years only and the years 2005 and 2006 to have a more accurate analysis by the end.

Count of year	
Country name	Total
Guyana	1
Cuba	1
Oman	1
Maldives	1
Suriname	1
Belize	2
Somalia	3
Bhutan	3
Eswatini	4
Djibouti	4
Somaliland region	4
Angola	4
South Sudan	4
Trinidad and Tobago	5
Burundi	5
Central African Republic	5
Lesotho	5
Qatar	5
Sudan	5
Gambia	5
Syria	7
Comoros	8
Libya	8
Jamaica	9

Count of year	
year	Total
2005	27
2006	89
2007	102
2008	110
2009	114
2010	124
2011	146
2012	141
2013	136
2014	144
2015	142
2016	141
2017	147
2018	141
2019	143
2020	116
2021	122
2022	140
2023	138
Grand Total	2363

Descriptive Statistics:

whr.describe()

	year	Life Ladder	Log GDP per capita	Social support	Healthy life expectancy at birth	Freedom to make life choices	Generosity	Perceptions of corruption	Positive affect	Negative affect
count	2363.000000	2363.000000	2335.000000	2350.000000	2300.000000	2327.000000	2282.000000	2238.000000	2339.000000	2347.000000
mean	2014.763860	5.483566	9.399671	0.809369	63.401828	0.750282	0.000098	0.743971	0.651882	0.273151
std	5.059436	1.125522	1.152069	0.121212	6.842644	0.139357	0.161388	0.184865	0.106240	0.087131
min	2005.000000	1.281000	5.527000	0.228000	6.720000	0.228000	-0.340000	0.035000	0.179000	0.083000
25%	2011.000000	4.647000	8.506500	0.744000	59.195000	0.661000	-0.112000	0.687000	0.572000	0.209000
50%	2015.000000	5.449000	9.503000	0.834500	65.100000	0.771000	-0.022000	0.798500	0.663000	0.262000
75%	2019.000000	6.323500	10.392500	0.904000	68.552500	0.862000	0.093750	0.867750	0.737000	0.326000
max	2023.000000	8.019000	11.676000	0.987000	74.600000	0.985000	0.700000	0.983000	0.884000	0.705000

Data Types:

Country name	object
year	int64
Life Ladder	float64
Log GDP per capita	float64
Social support	float64
Healthy life expectancy at birth	float64
Freedom to make life choices	float64
Generosity	float64
Perceptions of corruption	float64
Positive affect	float64
Negative affect	float64
dtype: object	

3. List of Questions to explore

1. What are the key determinants of happiness according to the World Happiness Report 2024?
2. How do different countries rank in terms of overall happiness, and what factors contribute to these rankings?
3. Are there significant changes in happiness levels compared to previous years' reports, and if so, what are the trends?
4. What cultural, social, economic, and environmental factors are associated with higher levels of happiness in specific regions or countries?
5. How does the distribution of happiness vary across different demographic groups (e.g., age, gender, income level)?
6. Are there any notable correlations or patterns between happiness levels and indicators such as GDP per capita, social support, life expectancy, or freedom to make life choices?
7. What policies or interventions have been successful in promoting happiness and well-being in different countries, and what can be learned from these initiatives?

8. How do global events or crises (e.g., pandemics, economic recessions, natural disasters) impact happiness levels, and how do countries respond to mitigate these effects?
9. What are the main challenges or obstacles to achieving greater happiness and well-being on a global scale, and what strategies can be adopted to address them?
10. How does the concept of happiness vary across cultures, and are there universal principles or practices that contribute to overall well-being?