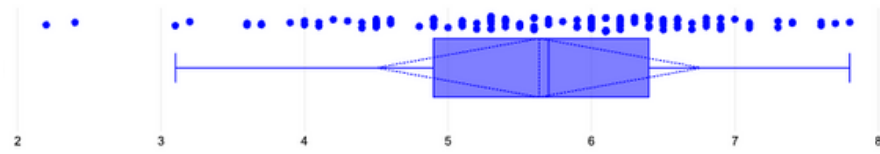


# THE SCIENCE OF HAPPINESS INDEX

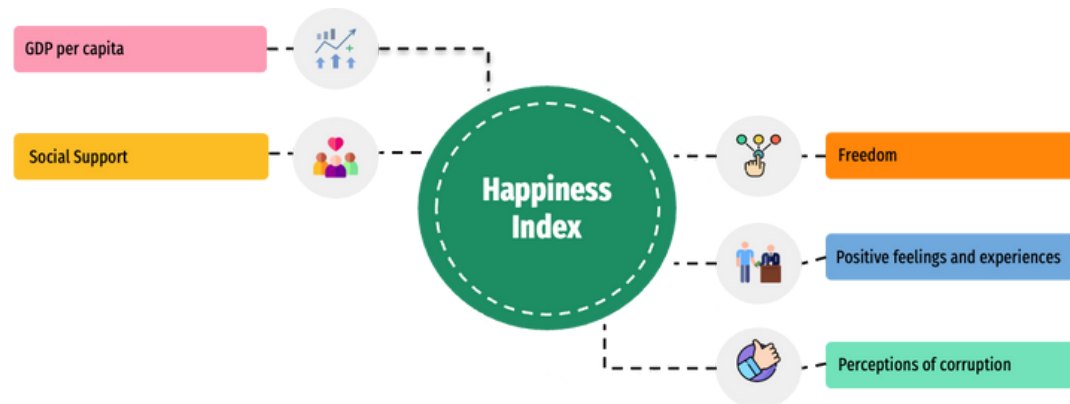
Factors affecting Happiness Index and Strategy to improve them

## DESCRIPTIVE STATISTICS



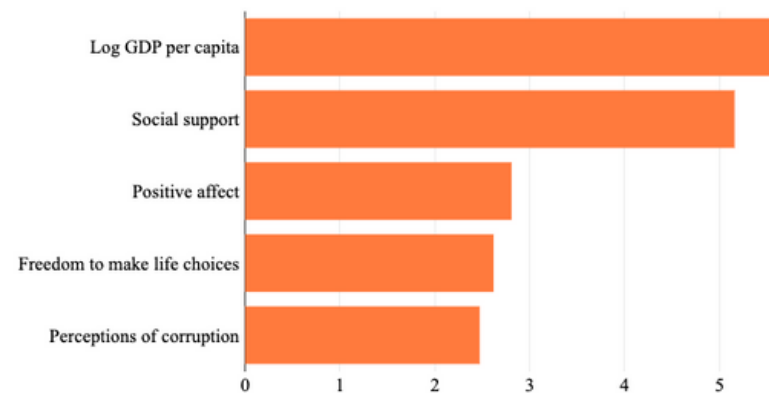
Minimun → 2.4  
Maximum → 7.8  
Mean → 5.63  
Median → 5.75  
Standard Deviation → 1.10

## FACTORS AFFECTING HAPPINESS INDEX

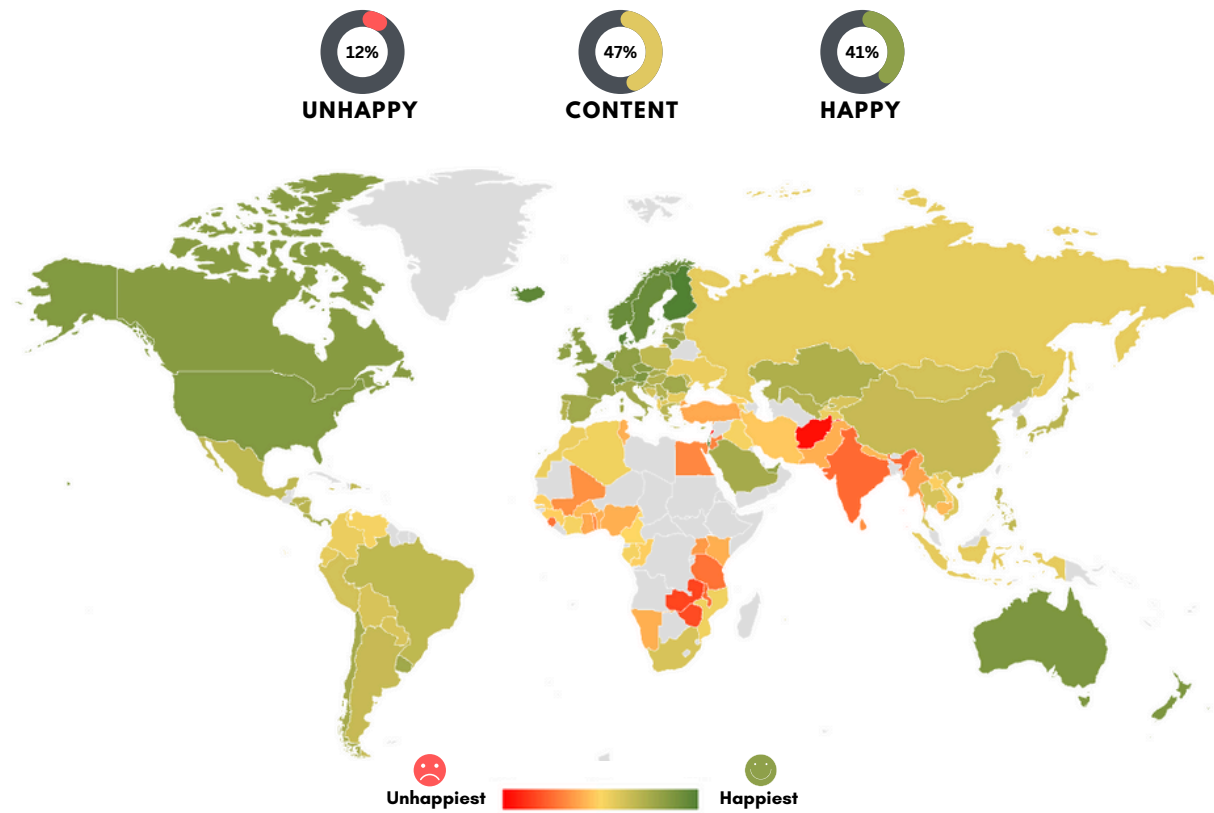


Of the total original factors in the data, only **FIVE** of them makes a significant effect on the happiness index of a country.

GDP has the **MOST** effect on the HAPPINESS INDEX while PERCEPTION OF CORRUPTION has the **LEAST** effect.



## HAPPY PLACES

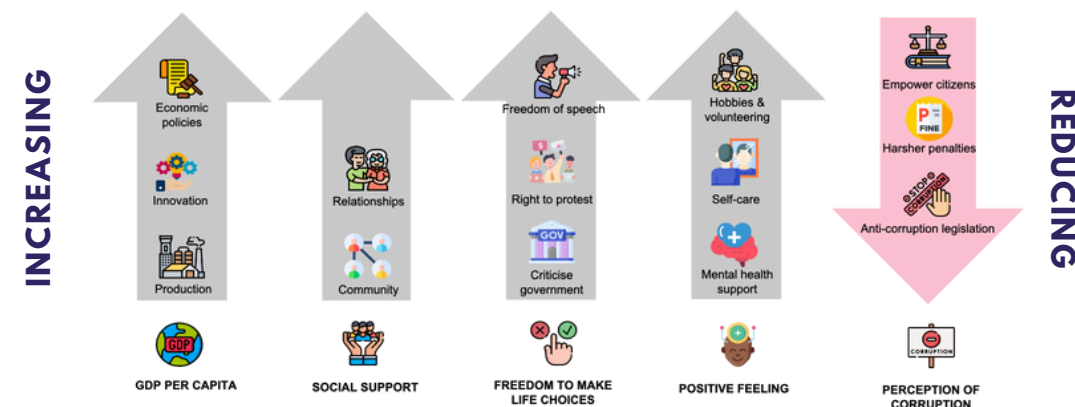


## CORRELATION MATRIX

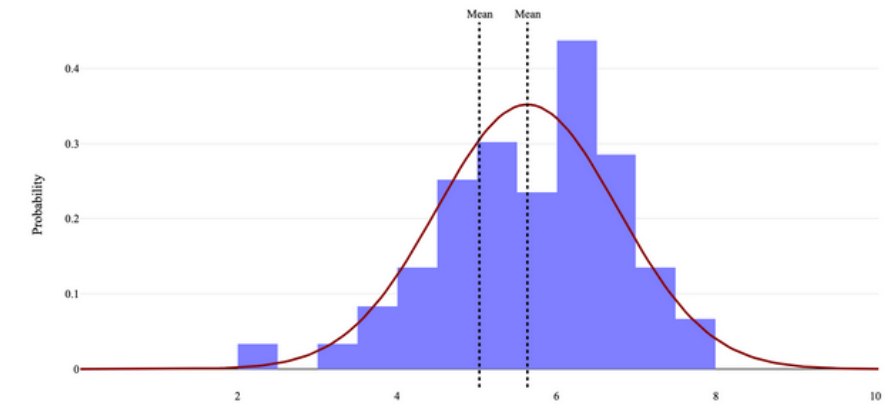
	Life Ladder	Log GDP per capita	Social support	Freedom to make life choices	Perceptions of corruption	Positive affect
Life Ladder	1.00					
Log GDP per capita	0.77	1.00				
Social support	0.83	0.72	1.00			
Freedom to make life choices	0.62	0.29	0.49	1.00		
Perceptions of corruption	-0.47	-0.42	-0.24	-0.44	1.00	
Positive affect	0.58	0.23	0.51	0.64	-0.27	1

Strong negative Strong positive

The **HAPPINESS INDEX** of a country can be increased by

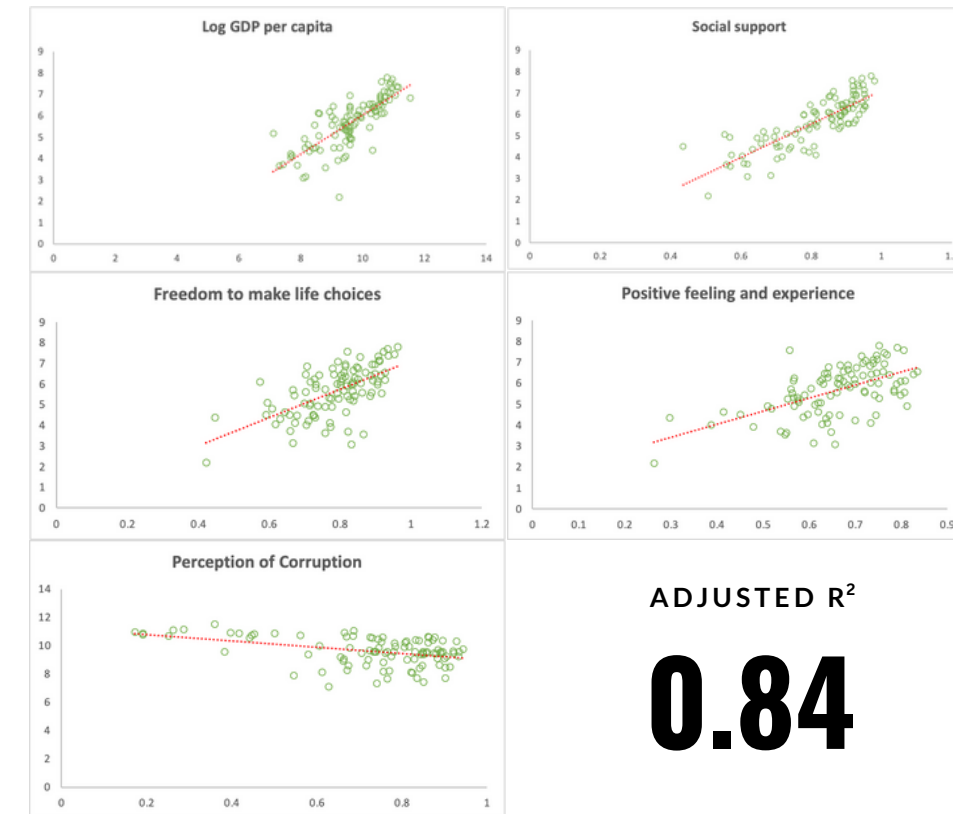


## ASSUMPTIONS



- **Linearity:** Slope parameters are linear
- **Independence of Errors:** No correlations across observations
- **Normality of error:** Error terms are normally distributed
- **Homoscedasticity:** Variability of the error term is the same for all observations
- **No perfect multicollinearity:** No exact linear relationship among independent variables

## BEST MODEL OF HAPPINESS INDEX



ADJUSTED R<sup>2</sup>

0.84

84% of the variation in the data can be explained by the following equation:

$$\text{Happiness index} = -3.66 + 0.45 \times \text{GDP} + 3.36 \times \text{Social Support} + 2.02 \times \text{Freedom} + 1.77 \times \text{Positive feelings} - 0.65 \times \text{Corruption}$$



World Happiness Report 2022

Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Aknin, L. B., & Wang, S. (Eds.). (2022). World Happiness Report 2022. New York: Sustainable Development Solutions Network.