

## Assignment: Discover Report

### 1. Topic Description

**Exploring Global Happiness Trends and Influencing Factors** aims to explore the complex interplay of variables that shape the happiness levels in countries around the world. Over the past decade, happiness has been increasingly recognized as a critical indicator of societal well-being, complementing traditional economic measures such as GDP.

The **World Happiness Reports** provide a comprehensive annual assessment of happiness across nations, evaluating how economic output, social support, life expectancy, freedom, generosity, and the absence of corruption contribute to happiness. By examining these factors in conjunction with socio-economic and environmental datasets, we aim to identify patterns and relationships that explain variations in happiness levels.

This project aims to answer key questions, such as:

- How do socio-economic factors such as income and education correlate with happiness?
- What role do life expectancy and health play in shaping national levels of happiness?
- Do environmental indicators, such as CO2 emissions, play a significant role in influencing happiness trends?

Through this analysis, the study hopes to uncover actionable insights to guide policymakers in promoting happier and more sustainable societies.

### 2. Dataset Descriptions

#### Dataset 1: World Happiness Reports (2013–2023)

[World Happiness Reports 2013-2023](#)

This dataset summarizes happiness rankings and scores for countries over a decade, based on data from the Gallup World Poll. It highlights the six main drivers of happiness:

- 1. Economic Production:** Measures GDP per capita as an indicator of prosperity.
- 2. Social Support:** Reflects the availability of support networks in each country.
- 3. Life Expectancy:** Captures public health outcomes and overall longevity.
- 4. Freedom:** Represents the perceived ability to make life choices.
- 5. Absence of Corruption:** Evaluates trust in government and institutions.
- 6. Generosity:** Quantifies charitable giving and the general spirit of altruism.

These scores help to rank countries on a happiness scale and provide detailed insights into the relative importance of each factor in influencing happiness. The dataset covers around 150 countries each year, providing a comprehensive view of global trends.

## **Dataset 2: Human Development and Related Metrics (1990–2021)**

### Global Socio-Economic & Environmental Indicators

This dataset provides a multi-dimensional view of development, health, income, and environmental impact by combining four interrelated files:

#### **1. Human Development Index (HDI)**

- Covers socio-economic development metrics like education, income, and life expectancy from 1990 to 2021.

- Columns: `ISO3`, `Country`, `HDI Rank 2021`, `Region`.

- Use Cases: Analyze long-term development trends and disparities.

#### **2. Life Expectancy at Birth**

- Focuses on health and longevity, offering annual data from 1990 to 2021.

- Columns: `ISO3`, `Country`, `Region`, `Life Expectancy 2021`.

- Use Cases: Explore links between health metrics and happiness.

#### **3. Gross National Income (GNI) per Capita**

- Tracks income distribution and economic prosperity globally over three decades.

- Columns: `ISO3`, `Country`, `Region`, `GNI Per Capita 2021`.

- Use Cases: Assess economic disparities and their role in shaping happiness.

#### **4. CO2 Production**

- Provides annual carbon emissions data, an essential metric for environmental sustainability analysis.

- Columns: `ISO3`, `Country`, `Region`, `CO2 Production 2021`.

- Use Cases: Investigate the impact of environmental factors on happiness.

This dataset complements the happiness data by providing a rich context of socio-economic and environmental dimensions. Together, these datasets allow for a holistic exploration of the determinants of happiness.

By combining insights from these datasets, this project will provide a nuanced understanding of global happiness trends and the factors that influence them, offering valuable perspectives for decision-makers and researchers.