**Exploring the Correlations Between Happiness and Other Key Factors in U.S. States**

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**1. Introduction**

* Background and Objective:

This project seeks to explore the key factors influencing happiness across U.S. states and analyze the relationships between **happiness**, **obesity rates**, **work environments**, **community environment**, and **emotional and physical well-being**. By understanding how these factors connect, I hope to offer ideas that could help shape policies and better allocate resources, ultimately improving people's lives across regions.

* Project Goal:
* Take a closer look at how happiness is spread across different states.
* Investigate the connection that exists between happiness and other indicators, such as the prevalence of obesity, emotional and physical health, workplace environment, and community environment.
* Make suggestions for policies that can raise happiness and quality of life.

**2. Data Overview**

* Data Source:

This project uses data from publicly available government datasets and research institutions, including information on Happiness Scores, Obesity Rates, and various State Indicators.

* Data Description:

( The data includes the following columns )

**State**: State name

**Happiness Score**: Happiness score of the state

**Obesity Rate**: Percentage of the population in each state that is obese

**Emotional & Physical Well-Being Rank**: Emotional and physical well-being ranking of the state

**Work Environment Rank**: Work environment ranking of the state

**Community & Environment Rank**: Ranking based on community and environmental conditions

**3. Data Exploration and Cleaning**

1. Import both datasets (**Happiness Dataset** and **Obesity Dataset**) into Tableau.
2. Combine Datasets (**Inner Join**)
3. Select the relevant columns
4. Ensure Data Types

|  |  |
| --- | --- |
| **Column** | **Data Type** |
| **State** | string |
| **Happiness Score** | int |
| **Obesity Rate** | float |
| **Emotional & Physical Well-Being Rank** | int |
| **Work Environment Rank** | int |
| **Community & Environment Rank** | int |

**4. Data Visualization in Tableau**

**Map:**

* National Happiness Map

A map of the united states

Description automatically generatedThis map shows the **Happiness Score** across various states in the U.S.

* Color Interpretation:

**Darker areas**: States with higher happiness scores (more intense colors, closer to the red spectrum).

**Lighter areas**: States with lower happiness scores (lighter colors, closer to the white spectrum).

* National Obesity, Work Environment, Emotional/Physical Well-Being, and Community Environment Rank Maps

A map of the united states

Description automatically generated

1. **National Obesity Map:**

* Color Interpretation:

**Darker areas**: states with higher obesity rates.

**Lighter areas**: States with lowerobesity rates.

1. **National Work Environment Rank Map:**

* Color Interpretation:

**Darker areas**: states with better work environment rankings (more favorable work conditions).

**Lighter areas**: states with worse work environment rankings.

1. **National Emotional and Physical Well-Being Rank Map:**

* Color Interpretation:

**Darker areas**: states with better emotional and physical well-being rankings.

**Lighter areas**: states with worse emotional and physical well-being rankings.

1. **National Community and Environment Rank Map:**

* Color Interpretation:

**Darker areas**: states with better community and environmental rankings.

**Lighter areas**: states with worse community and environmental rankings.

**Observation:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Region** | **Obesity Rate** | **Work Environment** | **Emotional and Physical Well-being** | **Community and Environmental Factors** | **Overall Happiness** |
| **West Coast** | Low | Positive | High | Strong | **High** |
| **Northeast** | Moderate | Moderate | High | Strong | **High** |
| **Mountain States** | Low | Moderate | High | Strong | **High** |
| **Southern States** | High | Poor | Low | Week | **Low** |
| **Midwestern States** | High | Poor | Low | Week | **Low** |

**Scatter Chart:**

* Correlation Between Happiness and Other FactorsA graph of different colored lines

  Description automatically generated with medium confidence

1. **Happiness vs. Obesity**

* Visual Representation:

The scatter plot shows a **negative correlation** between Happiness Scores and Obesity Rates.

* Analysis:

This reinforces the idea that obesity rates significantly influences overall well-being and happiness. Health interventions targeting obesity could improve quality of life.

1. **Happiness vs. Work Environment**

* Visual Representation:

The scatter plot shows a **positive correlation** between Happiness Scores and Work Environment.

* Analysis:

The plot suggests that improving job satisfaction, work-life balance, and creating a supportive work environment can have a substantial impact on a state's overall happiness.

1. **Happiness vs. Emotional/Physical Well-Being**

* Visual Representation:

The plot shows a **positive correlation** between Happiness Scores and Emotional/Physical Well-Being.

* Analysis:

States investing in mental health services and ensuring access to healthcare will likely see a rise in happiness.

1. **Happiness vs. Community/Environment**

* Visual Representation:

The scatter plot shows a **positive correlation** between Happiness Scores and Community/Environment.

* Analysis:

Creating stronger community ties and improving environmental quality, such as enhancing public spaces and providing better environmental conditions, could boost happiness.

**Observation**:

|  |  |  |
| --- | --- | --- |
| **Factor** | **Impact on Happiness** | **Correlation** |
| **Obesity Rate** | Strong | Negative |
| **Work Environment** | Moderate | Positive |
| **Community/Environmental Factors** | Weak | Positive |
| **Emotional/Physical Well-Being** | Strongest | Positive |

**5. Summary & Recommendations:**

* Summary:

|  |  |  |
| --- | --- | --- |
| **Happiness Levels** | **Region** | **Factors** |
| **Higher** | - West Coast States  - Northeast States  - Mountain States | - Low obesity rates - Strong work environments (Solid economic opportunities) - Strong healthcare systems - Well-developed social support systems |
| **Lower** | - Southern States  - Midwestern States | - Economic instability - Limited access to mental health and healthcare services  - Poor work environment - High obesity rates |

* Recommendations:
* For lower happiness areas

|  |  |  |
| --- | --- | --- |
| **Recommendation Area** | **Solution 1** | **Solution 2** |
| **Economic Stability** | Create **more job opportunities** through economic development programs that help improve the job market and lift people out of poverty | Support local small businesses and entrepreneurial ventures, **providing funding and resources** to boost the local economy |
| **Healthcare Access** | **Expand access to healthcare** services, especially mental health services, to improve residents' overall physical and emotional well-being | Increase the number of **healthcare facilities** and provide **subsidized healthcare** options for low-income families |
| **Public Health Initiatives** | Address the obesity epidemic by **promoting healthy lifestyles** through education and nutrition programs | Focus on **preventive healthcare** and **mental health services** to improve overall well-being |
| **Work Environment** | Improve **work conditions**, increase **job satisfaction**, and promote **work-life balance** in these regions to help employees feel more motivated and productive | Promote **employee benefits**, **workplace wellness programs**, and **labor rights** to enhance a better work environment |
| **Community Engagement** | Encourage **community-building activities** and **volunteerism** to strengthen strong social ties and support networks | Invest in **public spaces** such as parks, recreational facilities, and communal areas to offer people opportunities to gather and connect, fostering community cohesion |

* For higher happiness areas

|  |  |  |
| --- | --- | --- |
| **Recommendation Area** | **Solution 1** | **Solution 2** |
| **Maintain High Standards of Living** | Keep focusing on **improving healthcare, education, and community support systems** to ensure people continue to lead fulfilling lives | Take steps to **invest in sustainability and protect the environment**, making sure that future generations enjoy the same quality of life |
| **Promote Active Lifestyles** | Encourage **outdoor activities** and ensure everyone has easy access to parks and fitness programs, so that living a healthy and happy life becomes part of daily routine |  |
| **Social Support and Mental Health Services** | Ensure people have access to **mental health services** and **social safety nets** to maintain emotional and physical well-being |  |
| **Economic Development** | Keep fostering a **strong economy** that supports high-paying jobs, affordable housing, and provides more opportunities for everyone |  |

**6. References:**

* World Population Review -Happiest States 2025, from <https://worldpopulationreview.com/state-rankings/happiest-states>
* DATA.GOV - National Obesity By State, from <https://catalog.data.gov/dataset/national-obesity-by-state-d765a>