

☀ Sleep, Health, and Lifestyle Metrics Project



Overview

Project Scope

Examines the relationship between sleep quality, stress levels, and lifestyle factors such as BMI, physical activity, and occupation.

Data Exploration

Analyzes patterns and correlations to identify meaningful insights into how these factors affect health outcomes.



Team Members

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Key Insights

1

Gender and BMI

Higher percentage of females overweight than males. Males dominate the "Normal" BMI category, suggesting potential gender-based health differences.

2

Sleep Disorders

Overweight individuals more likely to suffer from insomnia and sleep apnea. Sleep disorders contribute to slightly elevated stress levels.

3

Stress and Occupation

Stress levels inversely correlated with sleep quality. Salesperson and Scientist have highest stress levels, while Teacher and Engineer have the lowest.

4

Heart Rate and BMI

Individuals with Normal BMI tend to have low resting heart rates. Overweight individuals show increased resting heart rates, and obese individuals consistently exhibit high heart rates.



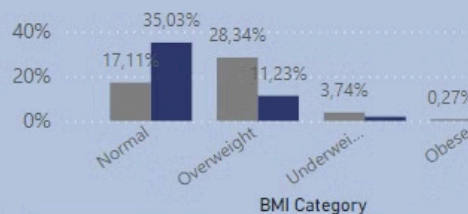


Sleep & Health Lifestyle Metrics



%GT of Genders by BMI Category

Gender ● Female ● Male



Age Group

All

Gender

All

Dataset Population

374

Overweight People

148

Average Stress Level

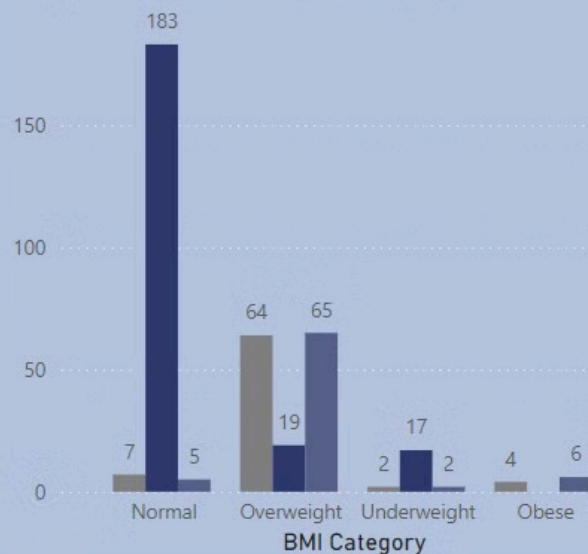
5,39

Average of Stress Level by Sleep Disorder



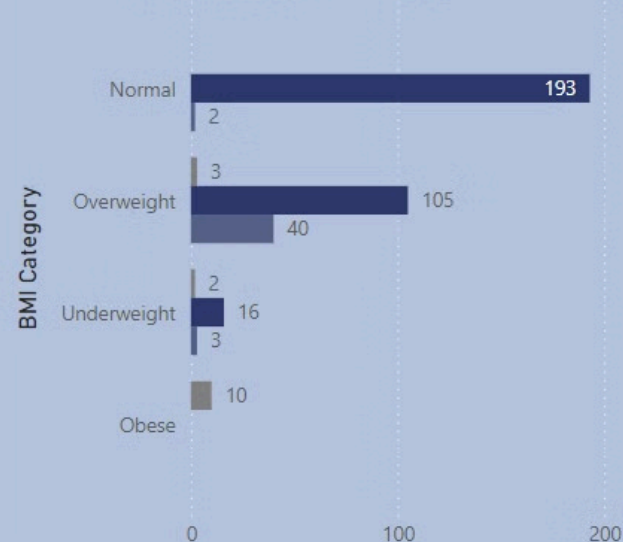
People by BMI Cat and their Sleep Disorders

Sleep Disorder ● Insomnia ● None ● Sleep Apnea



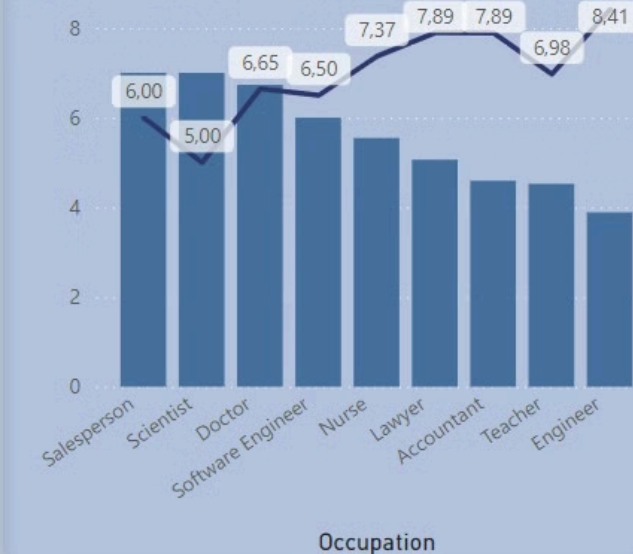
People by BMI Category and Heart Rate Group

Heart Rate Group ● High Resting HR ● Low Resting HR ● Medium Resting ...



Average Stress Level and Quality of Sleep by Occupation

● Average of Stress Level ● Average of Quality of Sleep



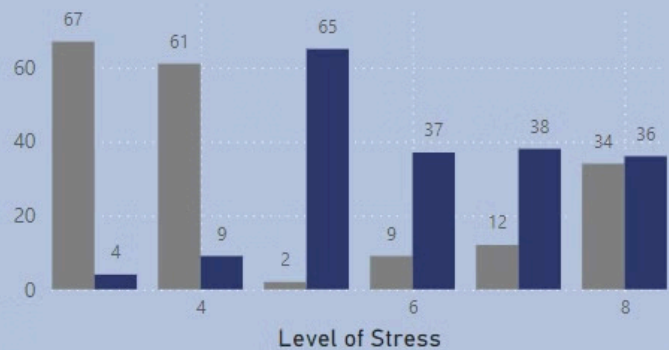


Sleep & Health Lifestyle Metrics



Distribution of Stress Levels

Gender ● Female ● Male



Age

27

59



Gender

All



Dataset Population

374

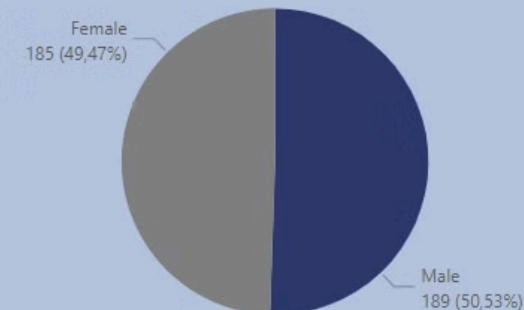
Young People

146

Average Activity (minutes)

59,17

Gender Distribution



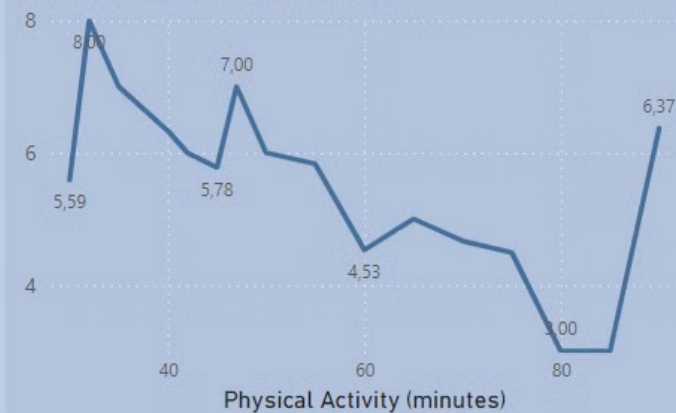
Avg Stress Level vs BMI Category



Avg Stress Level vs Daily Steps



Stress Level by Physical Activity (minutes)



Project Tools



Power BI

Interactive dashboards, exploring BMI categories, sleep disorders, stress levels, and occupations.



Streamlit

Interactive and user-friendly platform showcasing real-time data visualizations and insights based on selected filters.



Features

Dashboard Highlights

- Gender-wise BMI and stress distribution.
- Interactive charts for physical activity, heart rate, and sleep disorders.
- Occupation-based stress and sleep quality metrics.

Streamlit Application

- Customizable filtering based on age, gender, and physical activity levels.
- Real-time updates to visualizations for user-specific needs.

Future Scope

