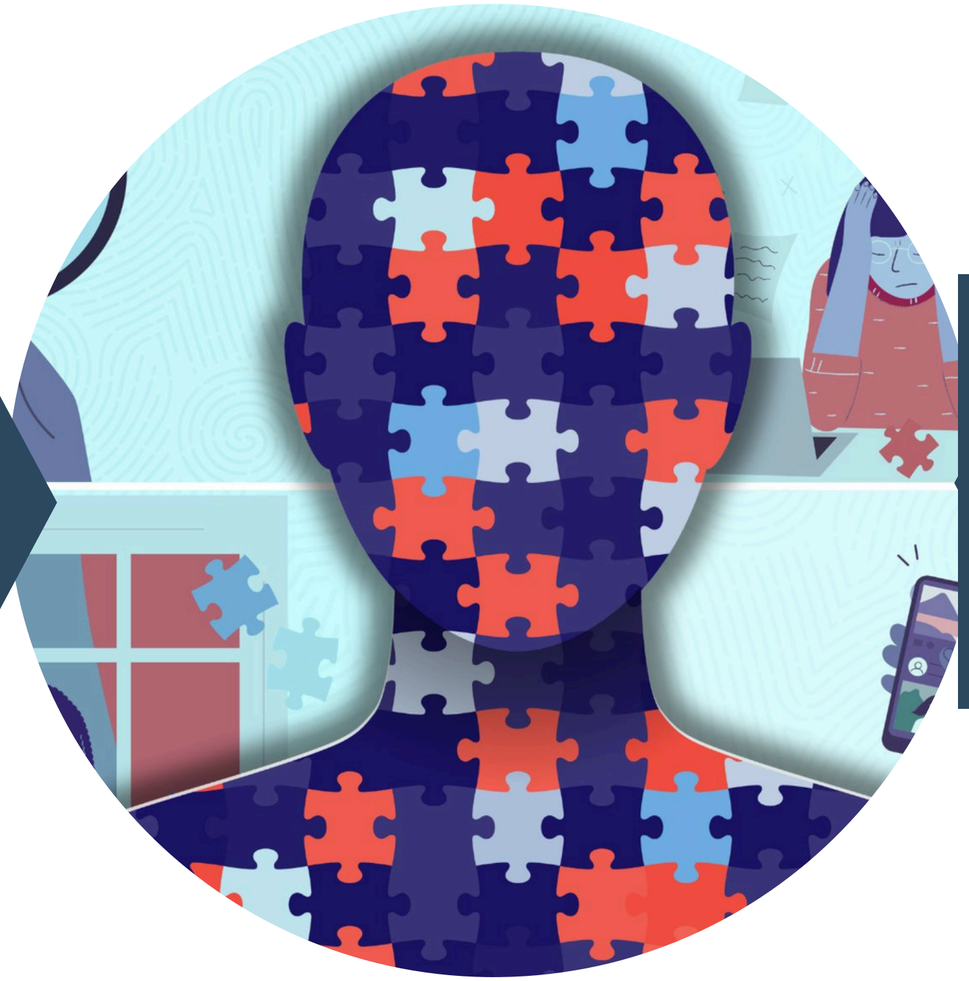


Predicting Stress Levels for Mental Health Support

AUGUST 4TH 2025

Project Introduction

What if we could predict who's at risk before they reach crisis?

Introduction

Goal

Predict stress levels using workplace and lifestyle factors.

Purpose

Identify high-risk individuals for early mental health support

Tools

Python (for ML), Power BI (for visualization).

Key Fields

Age, Gender, Sleep, Work Hours, Social Media, Risk Group.

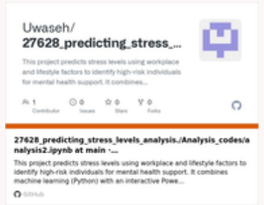
METHODOLOGY

Data cleaning and feature engineering in Python

ML model built using Logistic Regression, Random Forest, and Gradient Boosting.

Risk_Group column derived from stress, sleep, and work hours.

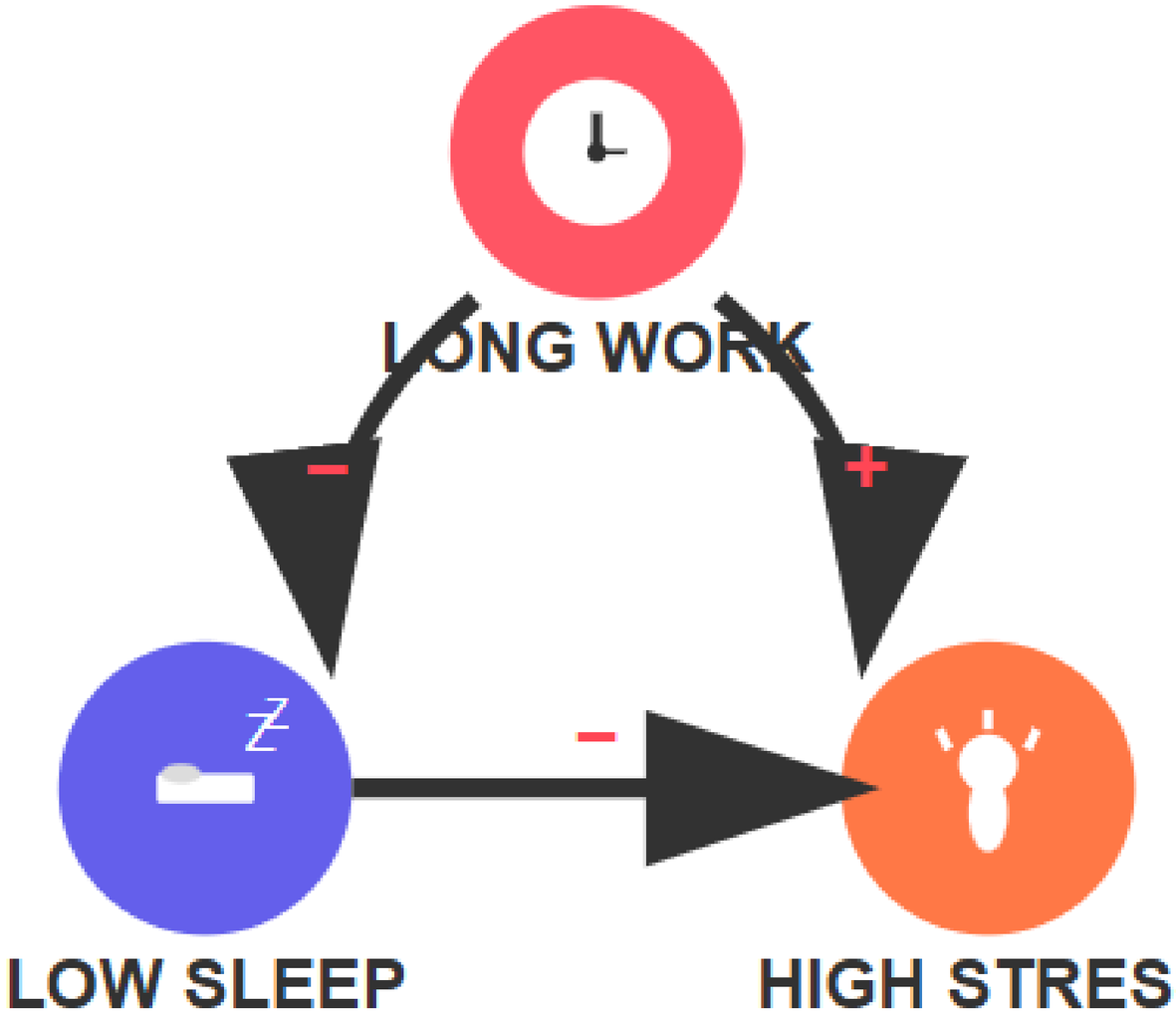
Cleaned data exported to Power BI for dashboard visualization



Results

STRONG CORRELATIONS

1.

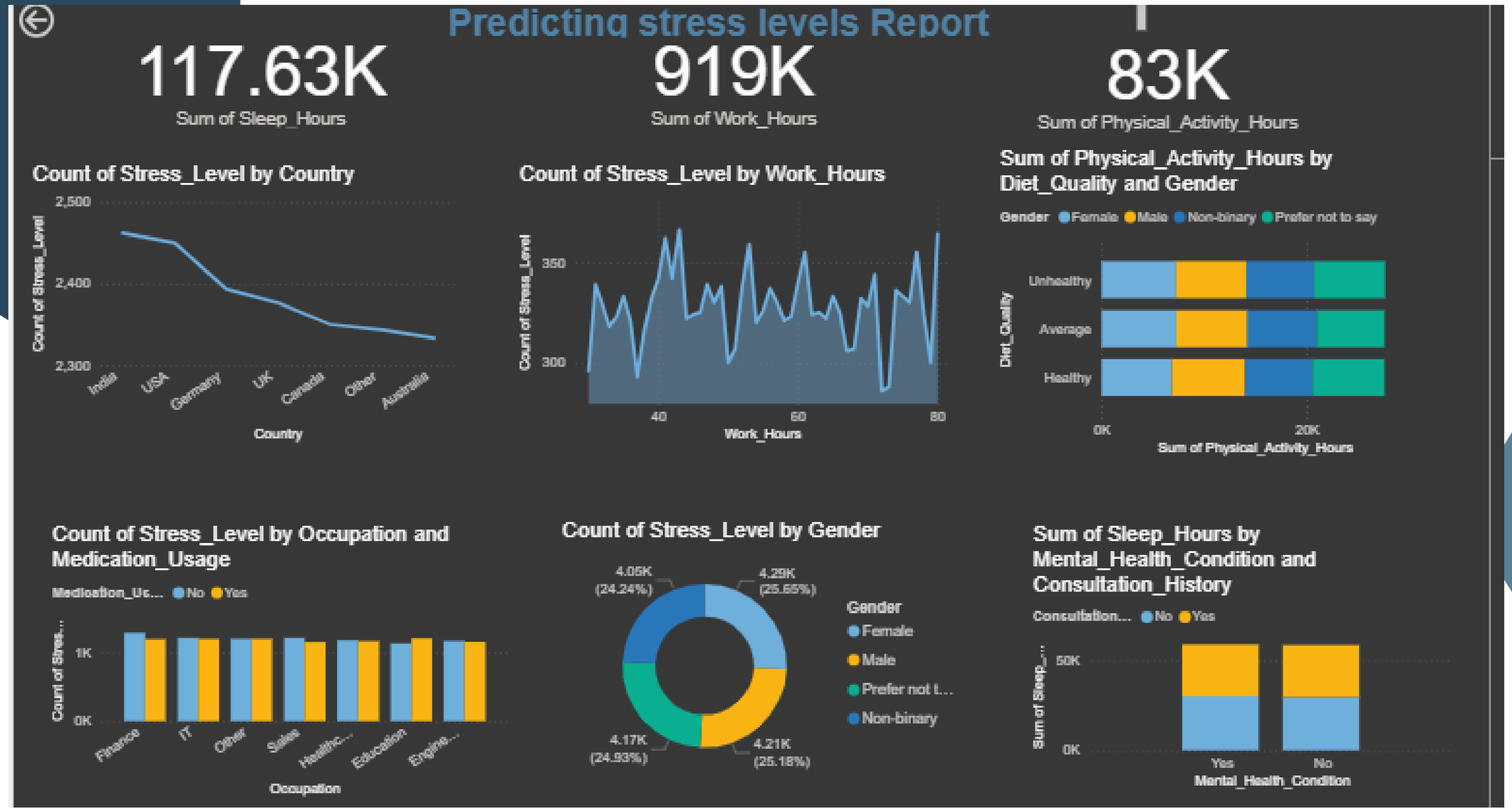


Each factor makes the others worse

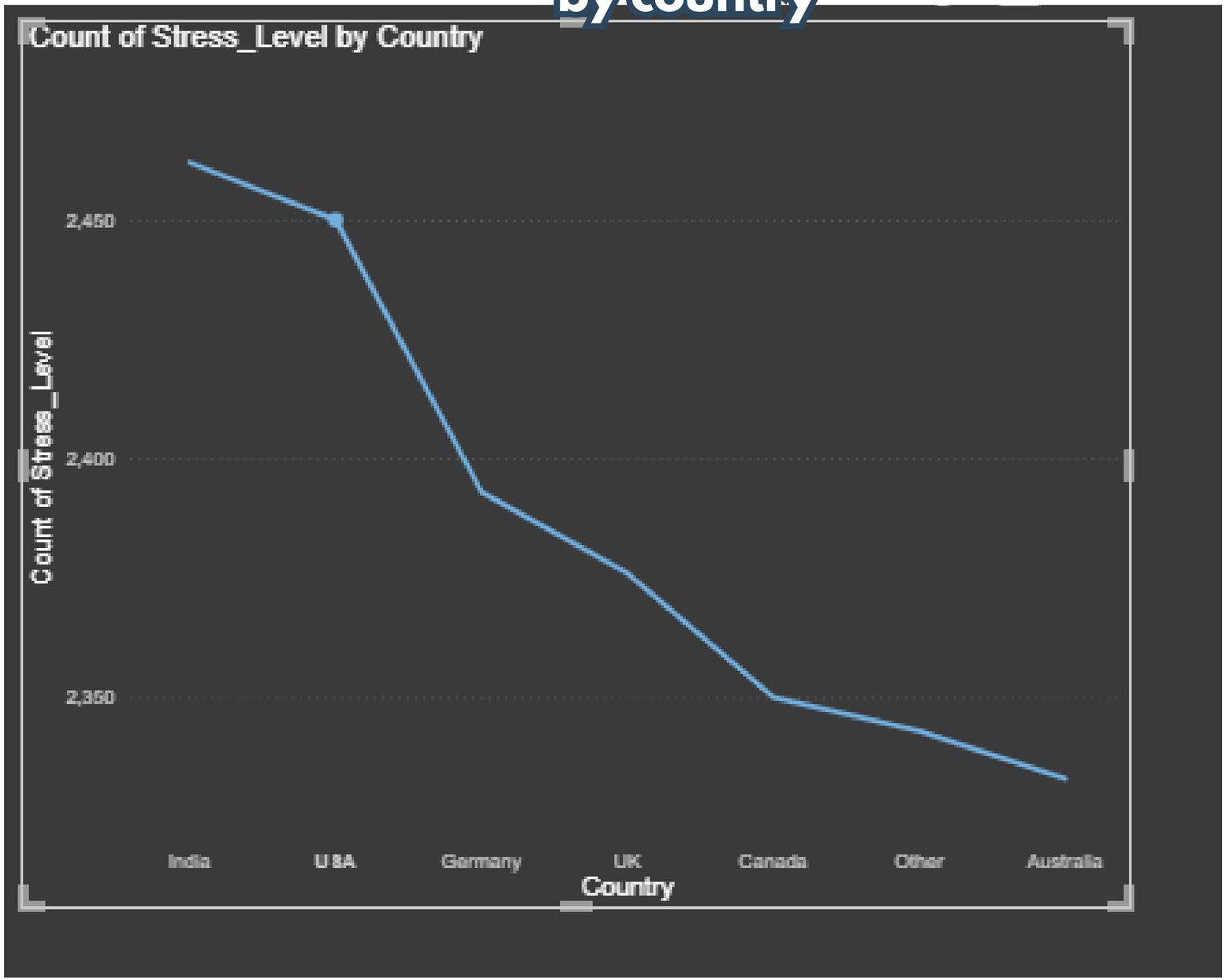
Creating a dangerous cycle

Power BI dashboard

A report is a collection of interactive visuals (like charts and tables) that help you explore and understand your data.



Geographic visuals highlight stress level distribution by country



Recommendations

01 Focus mental health efforts on high-risk profiles (e.g., high work, low sleep).

02 Implement wellness programs targeting sleep hygiene and work-life balance.

03 Use interactive dashboards to monitor mental health indicators in real-time.

04 Educate HR teams using data-driven stress detection.

MY FUTURE WORK

Expand dataset with real-time or wearable data.

Integrate live stress prediction model in dashboards

Deploy dashboards at organization or national level

Thank You

for your attention

4th August 2025