Global Student Social media Usage,Addiction & Mental Health Analysis

1.Project Overview

This project focuses on analyzing **global student social media usage patterns** and examining their relationship with addiction levels, mental health scores, academic impact, sleep behavior, and demographic factors.

The analysis is presented through **two interactive Power BI dashboards**, transforming raw student survey data into meaningful insights. The dashboards help identify trends in social media addiction and its effects on student well-being across different ages, genders, academic levels, platforms, and countries.

2.Purpose & Objective

The primary purpose of this project is to understand how **social media usage affects students' mental health and academic performance on a global scale**.

The key objectives are to:

- Analyze daily social media usage patterns among students
- Measure addiction levels and identify high-risk groups
- Examine the relationship between addiction and mental health scores
- Evaluate the academic impact of excessive social media usage
- Identify platforms contributing most to addictive behavior
- Support data-driven awareness and intervention strategies

The dashboards enable stakeholders to quickly interpret complex behavioral data through intuitive visualizations.

3.Key Features

- **Interactive Slicers**: Filter data by Academic Level, Gender, Country, Social Media Platform, and Academic Impact
- **KPI Scorecards**: Instant overview of Addiction Score, Mental Health Score, Daily Usage Hours, Sleep Hours, and Age
- **Comparative Analysis**: Addiction vs Mental Health trends across demographics
- **Platform-Based Insights**: Identifies platforms with higher addiction risk
- **Global View**: Country-wise visualization of addiction and mental health scores

4.Visual Components

- **KPI Cards**: Display average addiction score, mental health score, daily usage hours, sleep hours, and age
- **Bar Charts**: Addiction score by age group and most-used platform
- **Pie & Donut Charts**: Academic impact distribution and gender-based analysis
- **Line & Column Charts**: Addiction and mental health trends by hours of usage
- **Scatter Plot**: Relationship between addiction score and mental health score
- **World Map**: Country-wise distribution of addiction and mental health scores

5.Tools & Technologies Used

- **Power BI** – Data modeling, visualization, and dashboard development
- **CSV Dataset** – Raw student social media usage data
- **DAX** – Calculated measures for averages, counts, and comparisons
- **Power Query** – Data cleaning and transformation

6.Dataset Summary

The dataset contains global student survey data related to social media behavior and well-being.

Dataset Size

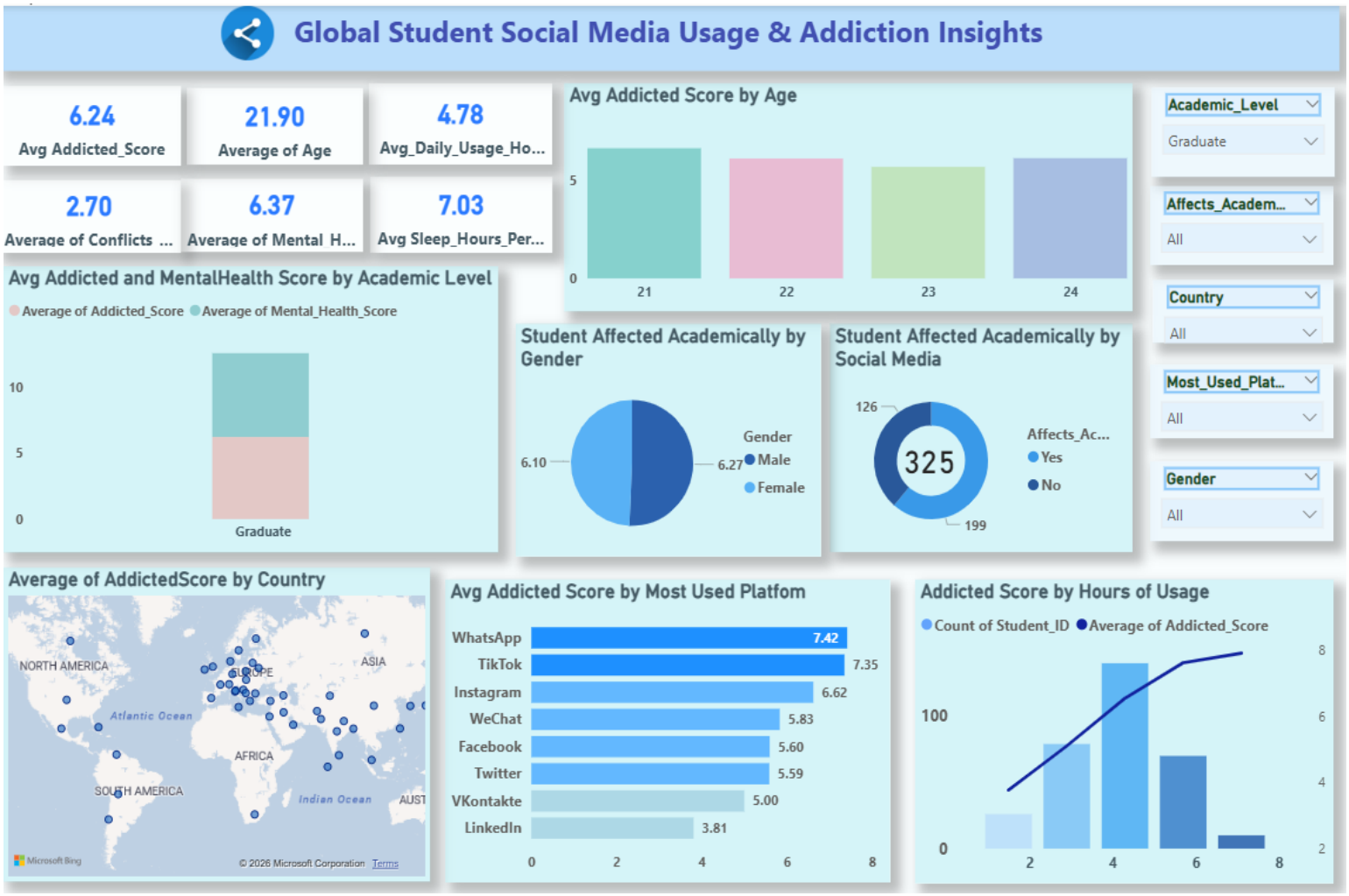
- **Number of Rows**: Multiple student records
- **Number of Columns**: Includes demographic, behavioral, and health-related attributes

Key Attributes

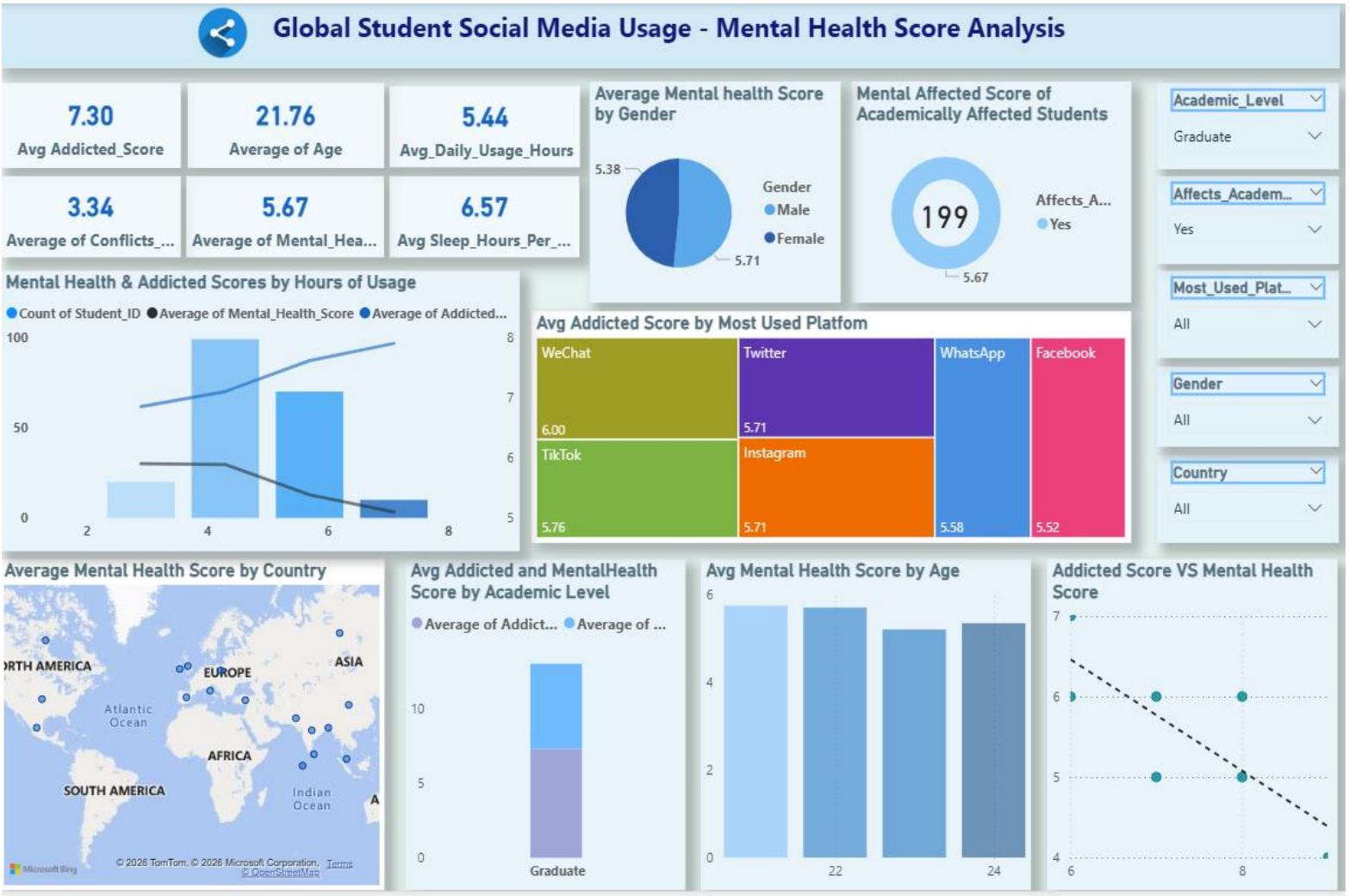
- Student ID – Unique student identifier
- Age – Student age
- Gender – Male / Female
- Country – Geographic location
- Academic Level – Undergraduate / Graduate
- Daily Usage Hours – Time spent on social media
- Addiction Score – Social media dependency level
- Mental Health Score – Self-reported mental well-being
- Sleep Hours – Average sleep duration
- Academic Impact – Whether academics are affected
- Most Used Platform – Primary social media platform

Data Preparation

- Removed missing and inconsistent values
- Standardized categorical fields (Gender, Academic Level, Platform)
- Ensured numerical consistency for scores and usage hours
- Created calculated measures for dashboard KPIs



(Dashboard For Addiction Insights)



(Dashboard for Mental Health Score Analysis)

7. Key Performance Indicators (KPI Section)

At the top of the dashboards, KPI cards present the most critical insights:

◈ Average Addiction Score

Represents the overall level of social media dependency among students.

Insight: Indicates moderate to high addiction levels, especially among students with higher daily usage hours.

◈ Average Daily Usage Hours

Shows how much time students spend on social media per day on average.

Insight: Higher usage hours strongly correlate with increased addiction scores and reduced mental health scores.

◈ Average Mental Health Score

Reflects students' overall mental well-being.

Insight: Mental health scores decline as addiction and usage hours increase.

🔷 Average Sleep Hours

Represents average sleep duration per student.

Insight: Increased social media usage is associated with reduced sleep hours.

8.Visual Analysis Sections

Addiction Score by Age

- Higher addiction scores observed among young adults (21–24 age group)
- Indicates increased dependency during higher education years

Insight: Age plays a significant role in social media addiction patterns.

Addiction & Mental Health by Hours of Usage

- Addiction score increases with higher usage hours
- Mental health score decreases as usage hours rise

Insight: Demonstrates a clear negative relationship between excessive social media use and mental well-being.

Academic Impact Analysis

- A considerable number of students report being academically affected
- Both genders are impacted with minimal variation

Insight: Social media addiction negatively affects academic performance regardless of gender.

Platform-Based Addiction Analysis

- **WhatsApp, TikTok, and Instagram** show higher addiction scores
- Platforms like LinkedIn show lower addiction levels

Insight: Entertainment-focused platforms contribute more to addictive behavior.

Country-Wise Analysis

- Addiction and mental health concerns observed across multiple regions
- Indicates that social media addiction is a global issue, not region-specific

9.Buisness Insight

- Excessive social media usage significantly affects mental health, sleep quality, and academics
- Addiction risk increases with usage duration and platform type
- Educational institutions can use these insights to promote digital well-being programs
- Students benefit from balanced and mindful social media usage habits
- Policymakers and counselors can design targeted intervention strategies