Addiction, Conflict, and Mental Health in Relation to Social Media

**Prepared by:** Dionisio II M. Payanay

Date: September 30, 2025

I. **Executive Summary:** 

This project used Excel for correlational analysis, SQL for data exploration, and Power BI for

visualization to examine the relationships between addiction, conflict, and mental health in relation to social

media usage. The goal is to identify and assess these relationships in order to provide actionable insights

that can improve mental health and promote healthier social media use.

II. **Objective:** 

• What is the average amount of social media use?

• Which academic level is most affected in terms of their academic performance?

• Is there a relationship between sleep duration and mental health?

Is there a relationship between mental health and conflicts related to social media use?

Is there a relationship between conflicts over social media use and social media addiction?

III. **Data Source:** 

Students Social Media Addiction (Kaggle)

IV. **SQL Analysis & KPIs Explored** 

Demographics

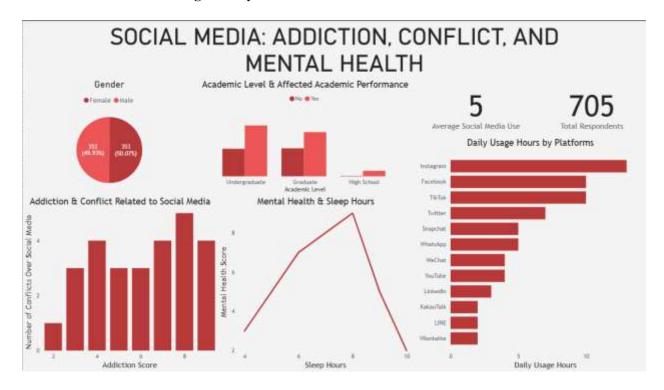
Academic Impact

Addiction & Conflict

• Mental Health

Social Media Usage

# V. Dashboard Design & Key Visuals



- Gender
- Academic Level & Affected Academic Performance
- Average Social Media Use
- Daily Usage Hours by Platforms
- Mental Health & Sleep Hours
- Addiction & Conflict Related to Social Media

## VI. Key Insights / Findings

- The average daily social media use is five hours.
- Undergraduates' academic performance is more affected compared to that of graduate and high school students.
- Instagram emerges as the most used social media platform.
- A Pearson correlation analysis revealed a very strong positive relationship (r = 0.707) between sleep duration and mental health, suggesting that participants who sleep longer tend to report better mental health.
- A Pearson correlation analysis revealed a very strong negative relationship (r = -0.893) between mental and conflicts related social media use. This suggest that respondents with better mental health tend to report fewer conflicts related to social media use.

 A Pearson correlation revealed a very strong positive relationship (r = 0.933) between conflicts related to social media use and social media addiction, suggesting that respondents with more conflicts tend to report higher levels of social media addiction.

### VII. Recommendations

- Interventions that improve better sleep hygiene (e.g., maintaining a consistent schedule, limiting screen time, and reducing stress) may also enhance mental health.
- Programs or interventions aimed at improving mental health may help reduce conflicts related to social media use.
- Interventions that address conflicts surrounding social media may also lower the risk of social media addiction.

### VIII. Limitation / Next Steps

- The implementation of interventions aimed at improving sleep, enhancing mental health, reducing social media use, and addressing social media addiction should be guided by relevant experts to avoid potential issues.
- Correlation does not imply causation; a relationship between two variables does not necessarily mean that one causes the other.

#### IX. Conclusion

A significant relationship was found between sleep duration and mental health, between mental health and social media use, and between conflicts over social media use and social media addiction. These findings highlight the need for timely interventions, particularly given the ease of access to social media. The implementation of such interventions should be guided by experts to ensure effectiveness and prevent potential issues. Finally, it is important to note that correlation does not imply causation; observed relationships do not necessarily indicate a direct cause-and-effect link.