

Mental Health & Social Media Usage Analytics Dashboard

1. Dashboard Sections

The dashboard consists of **Four** main sections, each addressing a specific analytical goal related to mental health indicators, lifestyle behavior, and digital usage patterns.

2.1 Executive Overview

Goal

Provide a high-level summary of overall mental health indicators and key behavioral metrics for quick decision-making.

Key Insights :

- KPI Cards: Overall average stress, sleep, and screen time levels.
- Monthly trend of stress levels to identify seasonal or time-based variations.
- Distribution of participants by mental state (Healthy, At Risk, Stressed).
- Comparison of average screen time across different mental states.

Key Visuals

KPI Cards:

- Average Stress Level
- Average Sleep Hours
- Average Screen Time (Minutes)
- Total Participants

Line Chart:

- Stress Level by Month (Trend analysis over time)

Donut Chart:

- Distribution of participants by Mental State

Column Chart:

- Average Screen Time by Mental State

Slicers:

- Mental State
 - Age Group
 - Platform
 - Year / Month
-

2.2 Behavioral & Health Analysis

Goal:

Analyze the relationship between lifestyle factors (sleep, physical activity, and screen time) and mental health indicators to understand how daily habits influence stress levels.

Key Insights:

- Comparison of average stress level, sleep hours, and screen time across different mental states.
- Impact of sleep duration categories on stress and sleep quality.
- Relationship between physical activity and stress level by mental state.
- Stress level variation across different age groups.

Key Visuals

KPI Cards:

- Average Stress Level
- Average Sleep Hours
- Average Screen Time (Minutes)
- Total Participants

Matrix / Table:

- Mental State vs Screen Time, Stress Level, Sleep Hours (with conditional formatting).

Scatter Chart:

- Physical Activity vs Stress Level (by Mental State).

Column Chart:

- Average Stress Level and Average Sleep Hours by Sleep Category (6–7 hrs, 7–8 hrs, 9+ hrs).

Bar Chart:

- Average Stress Level by Age Group

Filters / Slicers:

- Mental State
 - Age Group
 - Platform
 - Year / Month
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2.3 Platform & Usage Insights

Goal:

Analyze how different social media platforms influence screen time and stress levels, and identify platform-wise usage patterns linked to mental health outcomes.

Key Insights:

- Comparison of average stress levels across social media platforms.
- Identification of platforms with higher average screen time.
- Relationship between screen time and stress level at platform level.
- Dominant mental state associated with each platform.

Key Visuals

KPI Cards:

- Average Stress Level
- Average Sleep Hours
- Average Screen Time
- Total Participants

Table:

- Platform-wise Average Screen Time, Average Stress Level, and Mental State

Bar Chart:

- Average Stress Level by Platform

Scatter Chart:

- Avg Screen Time Vs Avg Stress Level by Platform.

Line Chart:

- Average Screen Time by Platform.

Slicers:

- Mental State
- Age Group
- Platform
- Year / Month

2.4 Social Media Interaction & Risk Analysis

Goal

Analyze how the quality of social media interactions (positive vs negative), combined with social media usage time, contributes to mental health risk across users and platforms.

Key Insights:

- Comparison of positive and negative interaction rates across mental states.
- Identification of platforms with higher negative interaction exposure.
- Relationship between social media time and negative interaction percentage.
- Behavioral differences between stressed, at-risk, and healthy users.

Key Visuals

KPI Cards:

- At Risk %
- Stressed Users %
- Positive Interaction %
- Negative Interaction %

Stacked Bar Chart:

- Positive Interaction % vs Negative Interaction % by Mental State

Column Chart:

- Average Social Media Time (Minutes) by Mental State

Combo Chart (Column + Line):

- Average Social Media Time and Negative Interaction % by Platform

Filters / Slicers:

- Mental State
 - Platform
 - Age Group
 - Year / Month
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3. Data Requirements

3.1 Executive Overview

Data elements required to present overall mental health and lifestyle indicators:

- Person ID
 - Mental State
 - Stress Level
 - Sleep Hours
 - Daily Screen Time (Minutes)
 - Age Group
 - Gender
 - Platform
 - Date (Year, Month)
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3.2 Life Style Analysis

Data elements required to analyze lifestyle habits and their impact on mental health:

- Person ID
 - Mental State
 - Stress Level
 - Sleep Hours
 - Physical Activity (Minutes)
 - Daily Screen Time (Minutes)
 - Sleep Category
 - Age Group
 - Platform
 - Date
-

3.3 Platform & Usage Insights

Data elements required to evaluate platform-wise usage patterns and stress impact:

- Person ID
 - Platform
 - Daily Screen Time (Minutes)
 - Stress Level
 - Mental State
 - Age Group
 - Gender
 - Date
-

3.4 Social Media Interaction Metrics

Data elements required to analyze interaction quality and behavioral risk:

- Person ID
 - Platform
 - Social Media Time (Minutes)
 - Positive Interaction %
 - Negative Interaction %
 - Mental State
 - Stress Level
 - Age Group
 - Date
-

4. Filters / Slicers

- Date (Year, Month)
 - Mental State
 - Platform
 - Age Group
-

5. Visuals / Charts

5.1 Overview Dashboard

- Provides a high-level summary of mental health indicators and lifestyle impact.

Visuals Used:

- KPI Cards (Avg Stress Level, Avg Anxiety Level, Avg mood Level, Total Participants)
 - Line Chart (Avg Stress Level by Month)
 - Column Chart (Avg Screen Time by Mental State)
 - Donut Chart (Total Participants by Mental State)
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5.2 Life Style Analysis

- Analyzes the relationship between lifestyle habits and mental health outcomes.

Visuals Used:

- KPI Cards (Avg Stress Level, Avg Sleep Hours, Avg Screen Time, Total Participants).
 - Column Chart (Avg Stress Level and Avg Sleep Hours by Sleep Category)
 - Scatter Chart (Physical Activity vs Avg Stress Level by Mental State)
 - Column Chart (Avg Stress Level by Age Group)
 - Matrix / Table (Mental State vs Avg Stress Level, Avg Sleep Hours, Avg Screen Time)
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5.3 Platform & Usage Insights

- Evaluates social media platform usage and its impact on stress and screen time.

Visuals Used:

- KPI Cards (Avg Stress Level, Avg Anxiety level, Avg Screen Time, Total Participants)
 - Column Chart (Avg Stress Level by Platform)
 - Clustered Column Chart (Avg Screen Time by Platform and Mental State)
 - Scatter Chart (Avg Screen Time vs Avg Stress Level by Platform)
 - Table (Platform-wise Avg Screen Time, Avg Stress Level, Mental State)
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5.4 Social Media Interaction & Risk Analysis

Visuals Used:

- KPI Cards (At Risk %, Stressed Users %, Positive Interaction %, Negative Interaction %).
 - Stacked Bar Chart (Positive & Negative Interaction % by Mental State).
 - Column Chart (Avg Social Media Time by Mental State).
 - Combo Chart (Avg Social Media Time and Negative Interaction % by Platform).
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6.Interactivity

6.1 Cross-filtering:

- Clicking on any chart (e.g., Mental State bar) filters all related visuals on the page

6.2 Drill-Down:

- Time-based charts will allow drill-down from Month to Day
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7. Calculations / Measures

Core Measures:

- Avg Stress Level = AVERAGE (Health[Stress_Level])
- Avg Anxiety Level = AVERAGE (Health[Anxiety_Level])
- Avg Sleep Hours = AVERAGE (Health[Sleep_Hours])
- Avg Screen Time (Min) = AVERAGE Health[Daily_Screen_Time_Min])
- Avg Physical Activity (Min) = AVERAGE (Health[Physical_Activity_Min])
- Total Participants = DISTINCTCOUNT (Health[Person_ID]).

- Positive Interaction % =

```
DIVIDE(  
    AVERAGE(Health[Positive_Interactions_Count]),  
    AVERAGE(Health[Positive_Interactions_Count])  
    + AVERAGE(Health[Negative_Interactions_Count])  
)
```

- Negative Interaction % =

```
DIVIDE(  
    AVERAGE(Health[Negative_Interactions_Count]),  
    AVERAGE(Health[Positive_Interactions_Count])  
    + AVERAGE(Health[Negative_Interactions_Count])  
)
```

- Stressed Users % =

```
DIVIDE(  
    CALCULATE(COUNTROWS(Health), Health[Mental_State] = "Stressed"),  
    COUNTROWS(Health)  
)
```

- At Risk % =

DIVIDE(

CALCULATE(COUNTROWS(Health), Health[Mental_State] = "At Risk"),

COUNTROWS(Health)

)

Custom Column

- Sleep Category = SWITCH (TRUE(), Health[Sleep_Hours] < 6, "Less than 6 hrs",.....)
- Age Group = SWITCH(TRUE(), Person_Details[Age]<=18, "Youth",.....)

8.Export / Reporting Needs

- **Export Options:** PDF, Excel, Power BI Service shareable link.
- **Distribution:** Internal analytics team, management dashboard.

9.Notes / Special Instructions

- Null or invalid data handled.
- Ensure all visuals maintain consistency in colour and format across pages