

SOCIAL MEDIA ADDICTION AND USAGE ANALYSIS

Hello Everyone, My name is **Priya Gupta**.

In this Project, I have utilize SQL queries to solve questions that were related to **Social Media Addiction and Usage**.

OBJECTIVE

- The objective of this dataset is to analyze social media usage patterns and addiction levels among students across different demographics.
- It aims to identify the **impact of platforms** on sleep, mental health, and daily behavior using data-driven insights.
- The analysis helps support better **awareness and management** strategies for healthy social media usage.

PROBLEM STATEMENT

- 1.Find the total number of students in the dataset.
- 2.Calculate the Avg Daily Hour Usage of the social media.
 - 3.Evaluate Avg Addiction Score.
 - 4.Add column-named as additional level.
- 5.Which platform users have the Lowest Avg Sleeping Hours.
- 6.Calculate the Country-wise Average Addiction Score.
 - 7.Find Most used social media platform.
- 8.Examine Platform-wise Addiction Contribution Percentage.
- 9.Show the Country + Most used Platform Combination with Highest Addiction.
- 10.Find the Top 3 Countries With Highest Average Usage Hours.
 - 11.Evaluate the Average Addiction Score by Country.
 12. Addiction Level vs Mental Health Score.
 - 13.Country vs Addiction Level.
- 14.Relationship Status vs Addiction Level.
15. Relationship Status vs Mental Health Score.

1. Find the total number of students in the dataset.

```
SELECT  
    COUNT(Student_ID)  
    AS Total_Student  
FROM studentsocialmediadata;
```

Total_Student
705

Insight

The dataset includes 705 students, providing a strong base for reliable analysis of social media usage patterns.



2. Calculate the Avg Daily Hour Usage of the social media.

```
SELECT  
    round(AVG(Avg_Daily_Usage_Hours))  
    AS Avg_Daily_Usage_Hours  
FROM studentsocialmediadata;
```

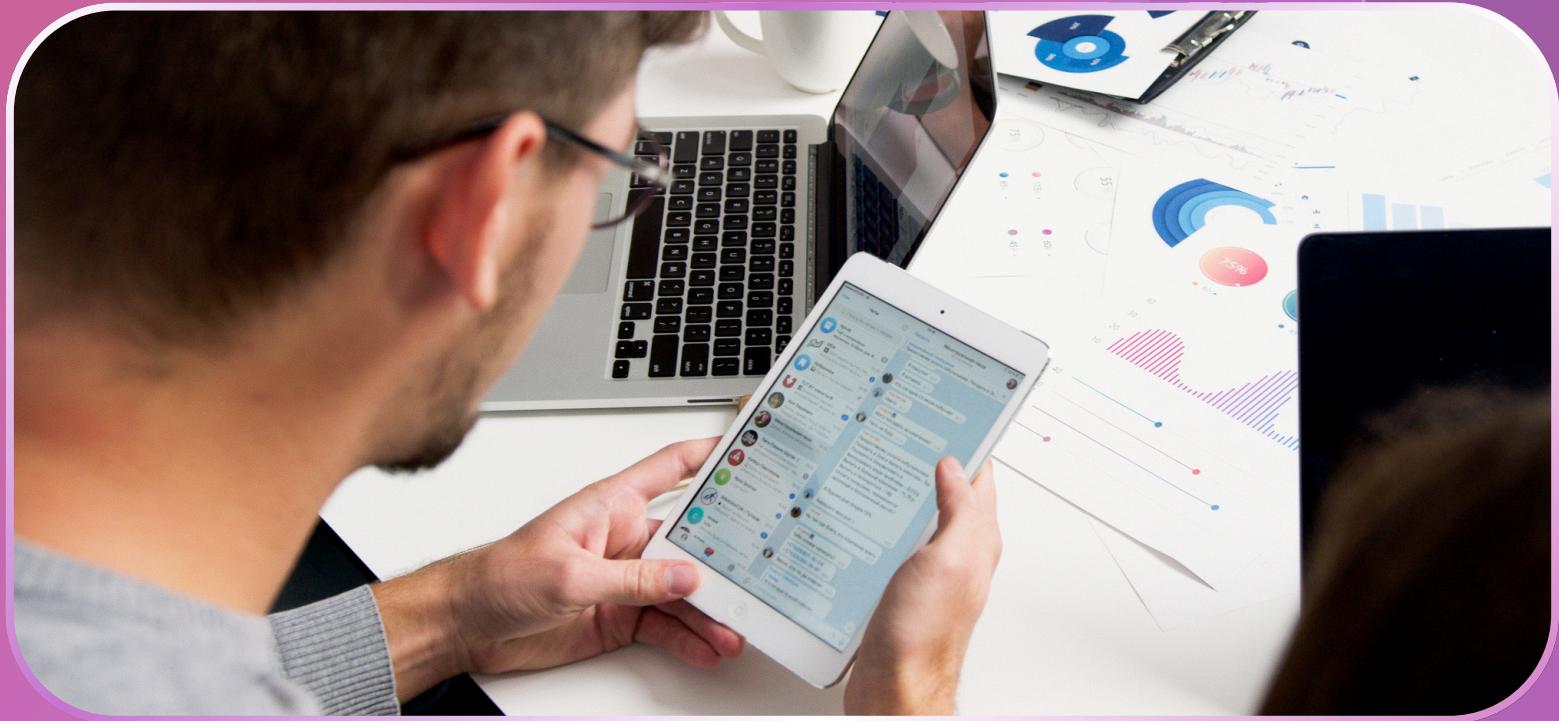
Avg_Daily_Usage_Hours
5

Insights
indicating a high level of engagement that may increase the risk of addiction and impact daily routines.



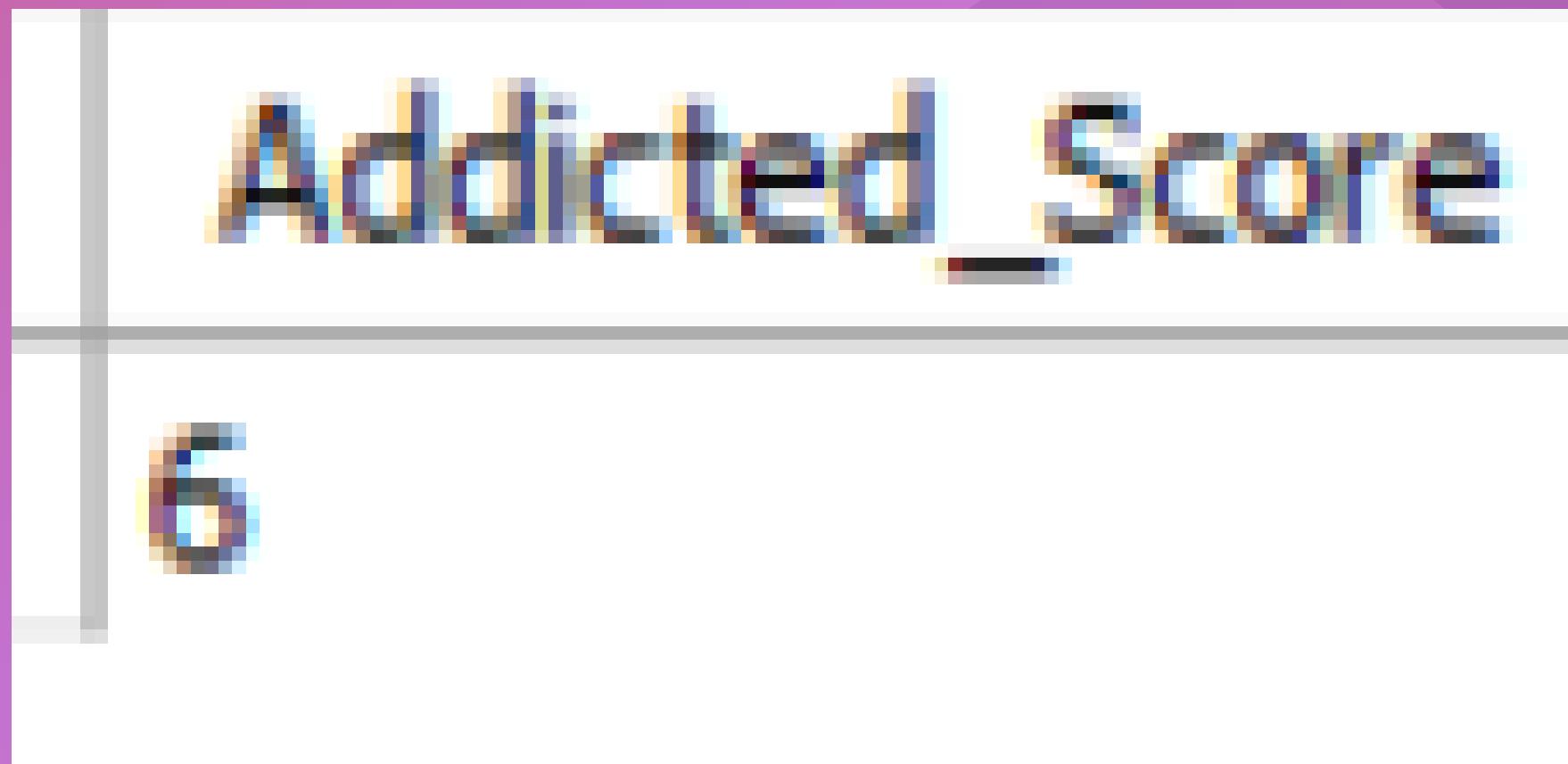
3. Evaluate Avg Addiction Score.

```
SELECT  
    round(AVG(Addicted_Score))  
AS Addicted_Score  
FROM studentsocialmediadata;
```



Insight

The average addiction score is 6, indicating a moderate level of social media addiction among students and highlighting the need for balanced usage habits.



4. Add column-named as additional level.

```
ALTER TABLE studentsocialmediadata
DROP COLUMN Addiction_Rank;
ALTER TABLE studentsocialmediadata
ADD Addiction_Level VARCHAR(20);
UPDATE studentsocialmediadata
SET Addiction_Level =
CASE
    WHEN Addicted_Score > 7
        THEN 'High'
    WHEN Addicted_Score
        BETWEEN 5 AND 7
        THEN 'Medium'
    ELSE 'Low'
END;
```

Addiction_Level
Medium
High
Low
High
Medium
Low
Medium
High
Low
High
Medium
Medium
Low
High
Medium



Insight

Students are clearly classified into Low, Medium, and High addiction levels, making it easier to identify risk groups and analyze behavior patterns effectively.

5. Which platform users have the Lowest Avg Sleeping Hours.

```
SELECT  
    Most_Used_Platform,  
    ROUND(AVG(Sleep_Hours_Per_Night),1)  
        AS Avg_Sleeping_Hours  
FROM studentsocialmediadata  
GROUP BY Most_Used_Platform  
ORDER BY Avg_Sleeping_Hours asc  
LIMIT 5;
```

Most_Used_Platform	Avg_Sleeping_Hours
Snapchat	5.7
WhatsApp	5.9
TikTok	6.4
YouTube	6.4
Instagram	7

Insight

Users of Snapchat and WhatsApp have the lowest average sleeping hours, indicating a stronger negative impact of these platforms on sleep patterns.

6. Calculate the Country-wise Average Addiction Score.

```
SELECT  
    Country,  
    round(AVG(Addicted_Score),0)  
    AS Avg_Addiction_Score  
FROM studentsocialmediadata  
GROUP BY Country  
ORDER BY Avg_Addiction_Score DESC;
```

Country	Avg_Addiction_Score
USA	9
Ecuador	9
Czech Republic	9
Armenia	9
Liechtenstein	9
Lebanon	9
Bangladesh	8
India	8
Norway	8
Belgium	8
Portugal	8
Thailand	8
Indonesia	8
UAE	8
Nigeria	8
Argentina	8



Insight
Average addiction scores vary across countries, indicating significant regional differences in social media usage and addiction behavior.

7. Find Most used social media platform.

```
SELECT  
    Most_Used_Platform,  
    COUNT(*) AS High_Addiction_Count  
FROM studentsocialmediadata  
WHERE Addiction_Level = 'High'  
GROUP BY Most_Used_Platform  
ORDER BY High_Addiction_Count DESC  
LIMIT 1;
```

Most_Used_Platform	High_Addiction_Count
TikTok	78



Insight

TikTok is the most used social media platform among highly addicted users, indicating its strong influence on addictive usage behavior.

8. Examine Platform-wise Addiction Contribution Percentage.

```
SELECT  
    Most_Used_Platform,  
    ROUND(  
        SUM(Addicted_Score) * 100 /  
        (SELECT SUM(Addicted_Score)  
         FROM studentsocialmediadata),  
        0  
    ) AS  
    Addiction_Contribution_Percent  
FROM studentsocialmediadata  
GROUP BY Most_Used_Platform;
```

Most_Used_Platform	Addiction_Contribution_Percent
Instagram	36
Twitter	4
TikTok	25
YouTube	1
Facebook	15
LinkedIn	2
Snapchat	2
LINE	1
KakaoTalk	2
Vkontakte	1
WhatsApp	9
WeChat	2



Insight

Instagram and TikTok contribute the highest share to overall addiction, showing they are the most influential platforms driving addictive social media behavior.

9. Show the Country + Most used Platform Combination with Highest Addiction.

```
SELECT Country, Most_Used_Platform,  
round(AVG(Addicted_Score),0)  
AS Avg_Addiction  
FROM studentsocialmediadata  
GROUP BY Country, Most_Used_Platform  
ORDER BY Avg_Addiction DESC;
```

Insight

Specific country-platform combinations (such as TikTok and Instagram in multiple countries) show the highest addiction scores, indicating platform influence varies strongly by region.

Country	Most_Used_Platform	Avg_Addiction
Lebanon	YouTube	9
India	TikTok	9
USA	Instagram	9
Russia	Instagram	9
Brazil	Snapchat	8
Norway	Instagram	8
Belgium	TikTok	8
Portugal	TikTok	8
Thailand	Instagram	8
Indonesia	TikTok	8
UAE	Instagram	8
Nigeria	Instagram	8
Argentina	TikTok	8
Peru	TikTok	8
Costa Rica	Instagram	8
Trinidad	TikTok	8



10. Find the Top 3 Countries With Highest Average Usage Hours.

```
SELECT  
    Country,  
    sum(AVG_Daily_Usage_Hours)  
    AS Avg_Usage  
FROM studentsocialmediadata  
GROUP BY Country  
ORDER BY Avg_Usage asc  
LIMIT 3;
```



Country	Avg_Usage
Sweden	2
Slovakia	2.3
South Africa	2.3

Insight

Countries like Sweden, Slovakia, and South Africa show the highest average social media usage hours, indicating stronger daily engagement compared to other regions.

11. Evaluate the Average Addiction Score by Country.

```
SELECT  
    Country,  
    ROUND(AVG(Addicted_Score), 2)  
    AS Avg_Addiction_Score  
FROM studentsocialmediadata  
GROUP BY Country  
ORDER BY Avg_Addiction_Score DESC;
```



Country	Avg_Addiction_Score
Ecuador	9.00
Czech Republic	9.00
Armenia	9.00
Liechtenstein	9.00
Lebanon	9.00
USA	8.60
UAE	8.13
Norway	8.00
Belgium	8.00
Portugal	8.00
Thailand	8.00
Indonesia	8.00
Nigeria	8.00
Argentina	8.00
Peru	8.00
Costa Rica	8.00

Insight

Several countries show high average addiction scores (around 8-9), indicating consistently elevated social media addiction levels across regions.

12. Addiction Level vs Mental Health Score.

```
SELECT  
    Addiction_Level,  
    ROUND(AVG(Mental_Health_Score), 2)  
        AS Avg_Mental_Health  
FROM studentsocialmediadata  
GROUP BY Addiction_Level  
ORDER BY Avg_Mental_Health;
```

	Addiction_Level	Avg_Mental_Health
High		4.97
Medium		6.41
Low		7.98



Insight

Higher social media addiction levels are associated with lower mental health scores, showing a clear negative impact of excessive usage on mental well-being.

13. Country vs Addiction Level.

```
SELECT  
    Country,  
    Addiction_Level,  
    COUNT(*) AS Users  
FROM studentsocialmediadata  
WHERE Addiction_Level = 'High'  
GROUP BY Country, Addiction_Level  
ORDER BY Users DESC;
```



Country	Addiction_Level	Users
India	High	33
USA	High	32
Bangladesh	High	10
Maldives	High	10
Nepal	High	10
Turkey	High	9
Mexico	High	9
Poland	High	8
Pakistan	High	8
Spain	High	8
UK	High	8
UAE	High	8
Russia	High	8
Italy	High	6
Ireland	High	2
Australia	High	1

Insight

Countries like India and the USA have the highest number of users in the high addiction category, indicating a larger concentration of highly addicted social media users in these regions.

14. Relationship Status vs Addiction Level.

```
SELECT  
    Relationship_Status,  
    Addiction_Level,  
    COUNT(*) AS User_Count  
FROM studentsocialmediadata  
GROUP BY Relationship_Status,  
Addiction_Level  
ORDER BY Relationship_Status,  
User_Count DESC;
```

Relationship_Status	Addiction_Level	User_Count
Complicated	Medium	16
Complicated	High	12
Complicated	Low	4
In Relationship	Medium	163
In Relationship	High	91
In Relationship	Low	35
Single	Medium	227
Single	High	96
Single	Low	61

Insight

Single users form the largest group with medium and high addiction levels, indicating a stronger tendency toward social media addiction compared to other relationship statuses.

15. Relationship Status vs Mental Health Score.

```
select Relationship_Status,  
       ROUND(AVG(Mental_Health_Score), 2)  
  AS Avg_Mental_Health  
FROM studentsocialmediadata  
GROUP BY Relationship_Status  
ORDER BY Avg_Mental_Health DESC;
```



Insight

Users in a relationship show slightly better mental health scores, while those with a complicated relationship status have the lowest average mental health.

Relationship_Status	Avg_Mental_Health
In Relationship	6.30
Single	6.20
Complicated	5.94

KEY INSIGHTS

- Students spend around 5 hours daily on social media, with most falling into the medium addiction level, indicating widespread but moderate dependency.
- Instagram, YouTube, and TikTok are the most impactful platforms, contributing the highest addiction levels and reduced sleeping hours among users.
- Higher addiction levels are strongly linked to poorer sleep and lower mental health scores, with noticeable variations across countries and relationship status.

Tools & Technologies

Database Language: SQL

Database: MySQL

SQL Tool: MySQL Workbench

Dataset Source: Kaggle – Students' Social Media Addiction

<https://www.kaggle.com/datasets/adilshamim8/social-media-addiction-vs-relationships>

Presentation Tool: Canva

Management Plan

- Identify high-risk users by **regularly monitoring addiction** scores and usage hours to enable early intervention.
- Design age-specific awareness programs, especially for the **18–25 age group**, focusing on balanced digital habits.
- **Promote healthy routines** by encouraging reduced night-time usage to improve sleep and mental well-being.
- **Platform-specific guidelines** should be developed, as Instagram and YouTube show the highest engagement levels.
- Country-wise strategies should be implemented, considering **regional differences** in addiction and usage behavior.
- **Track improvement over time** using dashboards to measure changes in addiction levels after awareness initiatives.