

# Student Depression Analysis Report

## 1. Objective

The objective of this study is to analyze patterns of depression among students by examining lifestyle, academic, and psychological variables. The aim is to understand how factors like sleep, study habits, stress, and satisfaction relate to mental health outcomes such as depression and suicidal thoughts.

## 2. Dataset Overview

- **Total Variables:** 11
- **Total Records:** Based on visualization (approx. 500+ students)
- **Key Variables:**
  - Gender, Age
  - Academic Pressure (1 to 5 scale)
  - Study Satisfaction (1 to 5 scale)
  - Sleep Duration (Categorical)
  - Study Hours (Continuous)
  - Financial Stress (1 to 5 scale)
  - Depression status (Yes/No)
  - Suicidal Thoughts (Yes/No)
  - Family History of Mental Illness

### **3. Key Insights from Visualizations**

#### **a. Sleep Duration**

- Sleep durations were relatively evenly distributed.
- Students getting “Less than 5 hours” or “5-6 hours” of sleep have the same counts as those getting “7-8 hours” or “More than 8 hours”.
- Sleep deprivation could potentially relate to depression but requires deeper statistical correlation.

#### **b. Study Hours**

- No strong trend seen with increasing study hours.
- Highest concentration of students reported studying 10–12 hours.
- Peak at 10 hours suggests a possible overexertion issue worth further exploration.

#### **c. Study Satisfaction**

- Highest number of students (116) rated their satisfaction as 4 out of 5.
- Dissatisfaction (rating 1 and 2) is still significant and may contribute to negative mental health outcomes.

#### **d. Academic Pressure**

- Most students rated academic pressure at level 3 (125 students).
- A bell-shaped distribution, indicating moderate to high pressure for many.

#### **e. Financial Stress**

- Distribution fairly even across the 5-point scale.
- Slightly higher at the lower end (Level 1 and 2), but still substantial stress across the board.

#### **f. Suicidal Thoughts**

- 51.8% of students reported having suicidal thoughts.
- This is a significant mental health red flag that demands institutional support and intervention.

#### g. Gender vs Depression

- Both male and female students show depression at almost equal rates.
  - Males: ~27.5% depressed
  - Females: ~22.7% depressed
- The difference is minor but suggests both genders face substantial challenges.

#### 4. Conclusions

- A significant portion of students experience **moderate to high academic and financial stress**, which appears to relate to the depression rates.
- **Over half of the student population has experienced suicidal thoughts**, underscoring the critical need for enhanced mental health services.
- **Study satisfaction and academic pressure** appear to be strong influencing factors and should be further analyzed for potential causation.

#### 5. Recommendations

- **Mental health awareness programs** should be implemented urgently.
- Institutions should consider **stress-reduction interventions** like counseling and mentorship.
- Encourage **healthy lifestyle habits** including better sleep, balanced study hours, and coping mechanisms for stress.