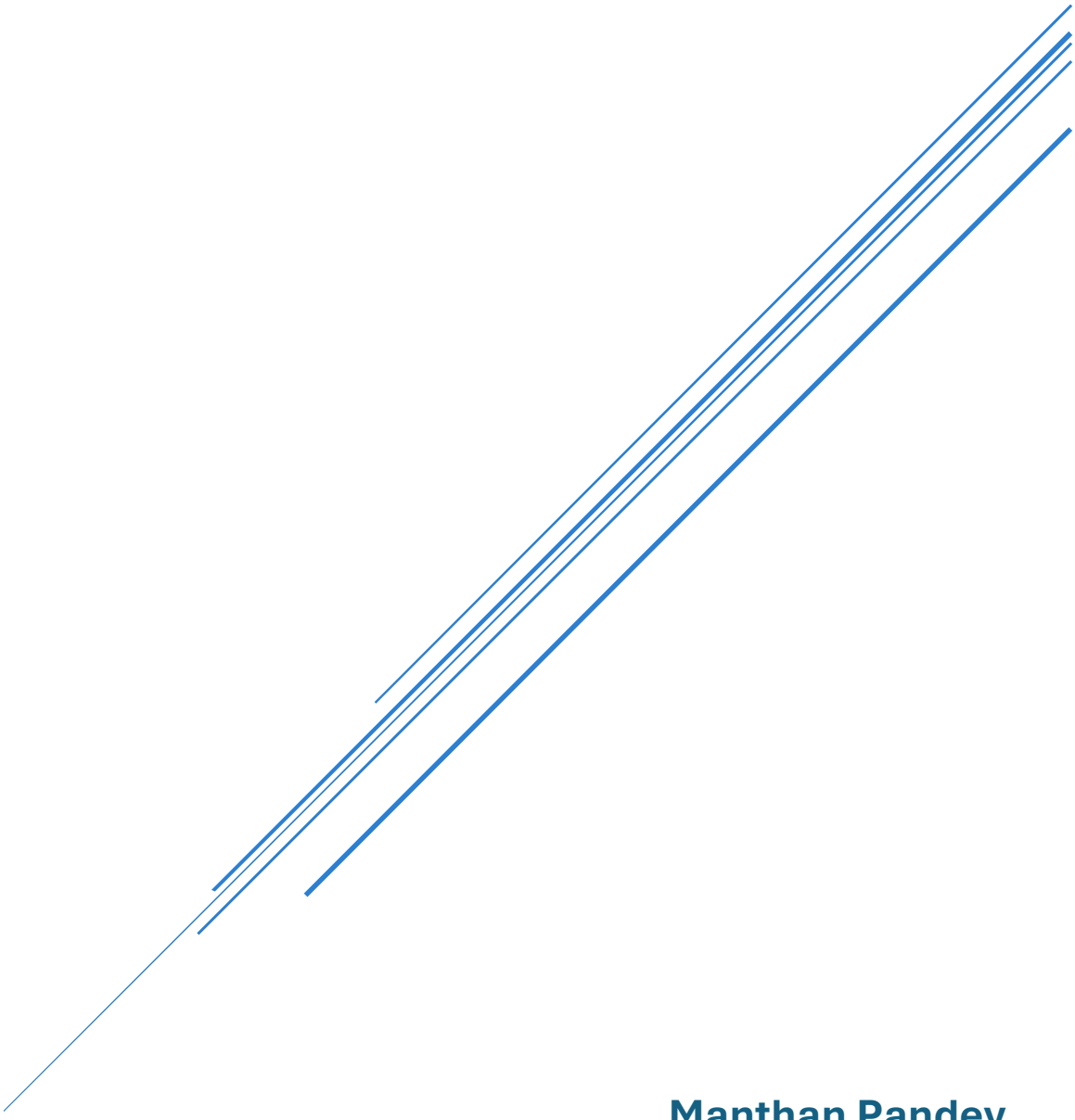
STUDENT DEPRESSION ANALYSIS REPORT



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1. EXECUTIVE SUMMARY

This dashboard presents a comprehensive data-driven analysis of depression patterns among students across various Indian cities.
By integrating multiple academic, lifestyle, and psychological indicators, the study identifies key risk factors, demographic trends, and predictive influencers contributing to depression prevalence.

The overall dataset comprises 28,000+ student records, representing diverse degrees, age groups, and regions. The average depression rate is 58.55%, with marked variation across gender, academic pressure, financial stress, and lifestyle habits.

2. OBJECTIVES

- To measure the prevalence of depression among students.
- To analyze academic, psychological, and lifestyle variables influencing mental health.
- To identify high-risk groups for targeted interventions.
- To assist educational administrators in developing data-driven wellbeing programs.

3. Purpose and Scope

The primary goal of this analysis is to quantify the prevalence of depression in student populations and identify key factors that contribute to emotional distress, burnout, and suicidal ideation.
The dashboard is designed to assist:

- Educational institutions in identifying at-risk student groups.
- Policy makers and mental-health organizations in developing targeted interventions.
- Academic researchers in understanding correlations between academic performance, lifestyle choices, and mental wellness.

4. Data Overview

Metric	*Value*
Total Students Analyzed	27,901
Average Depression Rate	58.55%
Students Reporting Suicidal Thoughts	17,656 (≈63%)
Average CGPA	7.66
Average Sleep Hours	6.34
Average Academic Pressure	3.14 / 5
Average Financial Stress	3.14 / 5
Average Study Satisfaction	2.94 / 5

5. Key Insights by Category

5.1 Gender

- Depression Rate (Male): 58.63%
- Depression Rate (Female): 58.45%
- Minimal gender gap — indicating that depression affects both genders nearly equally.
- Interpretation: Gender is not a strong differentiator in this population.

5.2 Age Group

Age Group	*Depression Rate*
18–19	**73.59%**
20–22	67.32%
23–25	64.04%
26–29	59.12%
30–34	41.07%
35+	26.53%

- Insight: Younger students (18–22 years) exhibit the highest depression levels, likely due to academic transition, identity stress, and exam pressure.

5.3 Academic Performance

CGPA Band	*Depression Rate*
8–8.9	**63.83%**
6–6.9	59.80%
9–10	57.56%
<6	55.56%
7–7.9	55.51%

- Observation: Mid-performing students (6–9 CGPA) show slightly higher depression rates, possibly reflecting academic pressure to improve or perfectionism anxiety among higher scorers.

5.4 Academic & Workload Factors

Factor	*Finding*
Average Academic Pressure	3.14/5
Average Study Satisfaction	2.94/5
Depression Rate (High Financial Stress)	**75.64%**
Depression Rate (Low Financial Stress)	37.39%

- Observation: Mid-performing students (6–9 CGPA) show slightly higher depression rates, possibly reflecting academic pressure to improve or perfectionism anxiety among higher scorers.

5.5 Lifestyle & Risk

Lifestyle Variable	*Observation*
Sleep <5 hours	64.51% depression rate
7–8 hours sleep	Lowest depression rate (50.93%)
Unhealthy diet	**70.73% depression rate**
Moderate diet	56.02% depression rate

- Conclusion: Healthy sleep and dietary patterns significantly reduce the likelihood of depression. Lifestyle choices are a major modifiable risk factor.

6. Predictive Analysis (Key Influencers Visual)

The AI-based Key Influencers analysis identifies the top predictors of depression:

Influencer	*Impact on Depression Likelihood*
↑ Academic Pressure	+3.27x more likely
↑ Financial Stress	+2.32x more likely
Profession = Architect	+1.45x
Unhealthy Dietary Habits	+1.38x
Work/Study Hours > 9	+1.32x
Age ≤ 20	+1.31x
Degree = Class 12	+1.28x

- Interpretation: Depression risk is primarily driven by pressure, financial strain, and lifestyle rather than demographics.

7. Geographic Analysis

City	*Total Students*	*Depression Rate*
Mumbai	934	High
Delhi	897	High
Hyderabad	763	High
Bangalore	739	Moderate
Chennai	641	Moderate

- Key Finding: Metro cities show higher absolute counts, but when normalized by population, Tier-2 cities (like Agra, Lucknow, and Jaipur) exhibit comparable or higher risk ratios, suggesting urban-stress diffusion.

8. City Case Study - AGRA

Metric	*Value*
Total Students	27901
Depressed Count	16,336
Depression Rate	58.55%
Suicidal Thoughts Rate	63%
Common Sleep Duration	5-7 hours
Typical Stress Level	Moderate - High

- Observation: Students with 7–8 hours of sleep and moderate stress reported relatively better mental health, whereas those under high financial and academic stress had the worst outcomes.

9. Correlation & Risk Interpretation

Variable	*Correlation to Depression*	*Insight*
Academic Pressure	Strong Positive	Pressure amplifies depression risk.
Financial Stress	Strong Positive	Economic strain is a primary trigger.
Sleep Hours	Negative	More sleep reduces depression likelihood.
Dietary Habits	Moderate Positive	Poor diet correlates with higher risk.
Study Satisfaction	Negative	Satisfaction acts as a protective factor.

10. Recommendations

A) Academic Institutions

- Integrate mental health workshops and financial counseling programs.
- Encourage balanced study hours and sleep hygiene education.
- Monitor high-risk students (low satisfaction + high stress) proactively.

B) Policy Makers

- Invest in student wellbeing analytics systems.
- Create city-level awareness programs focusing on Tier-2 cities.

C) Further Research

- Add temporal data (semester trends, exam periods).
- Collect intervention response data to assess improvement post-therapy.

11. Conclusion

The Student Depression Analysis Dashboard delivers a comprehensive, data-driven understanding of mental health among students in India, combining demographic, academic, and lifestyle factors to uncover root causes of depression. The analysis reveals that nearly six in ten students (58.55%) experience depression, and over 63% report suicidal thoughts, highlighting a widespread wellbeing crisis driven primarily by academic pressure and financial stress, which increase depression likelihood by 3.27x and 2.32x, respectively. Unhealthy sleep, poor diet, and long study hours further elevate risk, while gender differences remain negligible, showing that both male and female students are equally affected. Younger students (18–22 years) face the highest vulnerability, and although metros like Mumbai, Delhi, and Hyderabad show high case counts, Tier-2 cities such as Agra, Lucknow, and Jaipur exhibit comparable or higher risk ratios, signaling that mental stress extends beyond major cities. The findings confirm that depression is largely behavioral and environmental, making it preventable through interventions like stress management, financial counseling, balanced lifestyles, and campus wellness programs. Ultimately, this dashboard transforms complex psychological data into actionable insights, empowering institutions, NGOs, and policymakers to shift from reactive care to proactive prevention—creating educational environments that nurture both academic excellence and emotional resilience.