Student Mental Health and Academic Pressure: Analysis Report

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Track Number: 22/132002

Project Overview:
Mental health among students has become a critical concern in educational institutions. This project explores academic pressure and stress patterns among students to understand their well-being and identify support needs.

Dataset Introduction:
The dataset contains survey responses from 33 students with 8 variables: **Timestamp**, **Age**, **Gender**, **Current education level**, **Academic pressure level** (1-5 scale), **Stress frequency** (Always/Often/Sometimes), and **Average hours of sleep per night.**

Data source: https://www.kaggle.com/code/devraai/student-mental-health-and-academic-pressure-ana/notebook

Problem Statement:
This analysis examines: The distribution of academic pressure levels, frequency of stress among students, student gender and education level differences in pressure experiences, and finally prevalence of high-pressure cases.

Data Cleaning:
The cleaning process here involved: checking for missing values (none found), removing duplicates (none found), standardizing column names, and cleaning text data for uniformity.
The final dataset contains 33 complete records with no issues.

Dashboard & Insights:
The dashboard contains even visualizations showing the following:

- Academic Pressure Distribution - 72.7% report high pressure (levels 4-5)
- Stress Frequency - 63.6% stressed "Sometimes," 36.4% frequently stressed
- Gender Distribution - 64% male, 36% female
- Education Breakdown - 73% College, 18% University, 9% Other
- Pressure by Education - Varied patterns across levels

- Stress by Gender - Similar patterns between genders
- Pressure by Gender - Males: 3.95/5, Females: 3.83/5

Key Findings: Nearly three-quarters of students experience high academic pressure. Average pressure is 3.91/5. Gender shows minimal impact on pressure levels. Stress is universal, but frequency varies.

Conclusion:

High academic pressure affects 72.7% of students surveyed. The findings suggest educational institutions should implement stress management programs, provide mental health support, and review workload policies. Future research should expand the sample size and include additional variables like sleep patterns, not just average hours of sleep, and specific stress causes.

Tools: Python (Pandas, Matplotlib, Seaborn)
Dataset source: Kaggle
Url: https://www.kaggle.com/code/devraai/student-mental-health-and-academic-pressure-ana/notebook
Platform: Google Colab
Date: February 2026