

The well-being of students has increasingly come under scrutiny, particularly in the context of their academic and social environments, which are often sources of substantial stress. This approach not only helps in identifying the predominant stressors but also in understanding how different factors interact with each other, providing a foundation for holistic intervention strategies. This study employs a comprehensive dataset encompassing various psychological, physiological, environmental, academic, and social dimensions to explore students' stress dynamics. By integrating machine learning techniques, specifically correlation analysis and Random Forest modeling for feature importance evaluation, the study aims to provide a detailed understanding of how these factors interrelate and impact student stress. Machine learning offers robust analytical capabilities that can handle complex, multi-dimensional data, making it possible to derive more nuanced insights into the stress factors affecting students.