

Datavis_report

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Summary

The topic I have chosen for my end-of-term project and poster presentation is “Analyzing the factors affecting students’ stress levels and identifying which variables have the greatest impact”. The dataset I will use for this project is called Student Stress Level Dataset. This dataset will be used to analyze the factors that influence students’ stress levels and to determine which variables have the most significant effect.

The dataset contains 1100 observations and 21 variables that bring together academic, social, environmental, physiological, and psychological factors. In the past, access to information and opportunities was not as easy as it is today. Nowadays, people have access to numerous resources and conveniences that previous generations could not even imagine. While this accessibility has many positive aspects, it also carries some challenges and negative consequences. For instance, the endless competition among students is one of these factors. Although general awareness has increased over time, due to the reasons mentioned above, I believe that competition among students has intensified, leading to higher stress levels influenced by multiple variables. Some of the main causes of this include social pressure, performance anxiety, living conditions, comparison, and competition.

In this project, my goal is not only to measure students’ stress levels but also to analyze the underlying causes of this stress, examine its determinants, and explore how these psychological, physiological, academic, social, and environmental dimensions interact with each other. Through the findings of this study, my main objective is to identify the factors that most strongly affect students’ stress levels and to raise awareness about ways to reduce them. By highlighting these stress-inducing factors, I also aim to contribute to the development of academic and psychological support processes for students. Thus, this project does not only target individual improvement but also aims to promote societal and solution-oriented approaches to understanding and addressing student stress. Moreover, it seeks to contribute to a more holistic evaluation of the factors affecting students’ quality of life.

Dataset Description

This dataset contains 1100 observations and 21 variables. These variables combine academic, social, environmental, physiological, and psychological factors.

Psychological factors: anxiety_level, selfEsteem, depression, mental_health_history
Physiological factors: headache, blood_pressure, sleep_quality, breathing_problem
Academic factors: academic_performance, study_load, teacher_student_relationship, future_career_concerns
Social factors: peer_pressure, social_support, bullying, extracurricular_activities
Environmental factors: noise_level, living_conditions, safety, basic_needs

This dataset was obtained from the Kaggle platform.

Dataset source:<https://www.kaggle.com/datasets/rxnach/student-stress-factors-a-comprehensive-analysis>