

The Effect of Environment on Student Grades and Behavioral Analysis at ENSSEA

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1 Introduction

This research aims to explore the effect of the educational environment on student performance at ENSSEA. Through surveys and data collection, we will analyze how academic, social, and psychological factors correlate with student grades. Additionally, the study will focus on uncovering behavioral and mental health trends among the student population to provide insights into the spread of negativity and ways to foster a positive community.

There are two main objectives for this study:

- **Primary Objective:** To study how different environmental factors (academic, social, and physical) influence student grades.
- **Hidden Objective:** To analyze student mental health, behavioral tendencies, and the spread of negativity within ENSSEA.

2 Problematic

2.1 Understanding the Problem

Environmental factors such as academic stress, social interactions, and physical infrastructure can significantly affect a student's performance and mental health. This research focuses on how these factors shape not only academic outcomes but also students' well-being and behavior.

There is also the issue of growing negativity within the student body, which poses a challenge to creating a supportive and positive academic community. Understanding the causes of this negativity is essential for fostering a healthier school culture.

3 Data Collection Methodology

3.1 Survey Structure

The survey is divided into two forms:

- **Form 1:** Focuses on academic and demographic information, mental health, and social engagement.
- **Form 2:** Delves into attitudes, perceptions, behavioral indicators, negativity, and community support.

The survey is distributed in three languages: Arabic, French, and English. This ensures inclusivity and ease of understanding for all respondents.

3.1.1 Sections and Variables

The key sections and the potential variables derived from the questions are:

- **Demographic Information:** Age, gender, region, academic level, residence status (on-campus/off-campus).

- **Academic Performance:** Semester 1 and 2 scores, study hours per day, sleep hours per day, library usage (school and external).
- **Mental Health and Well-being:** Stress levels (on a scale of 1-5), satisfaction with living conditions, homesickness, feelings of loneliness, self-assessed mental health.
- **Behavioral and Social Engagement:** Interaction with teachers outside class, collaboration with classmates, participation in student clubs, social interactions with friends, romantic relationship status and its effect on daily life.

3.2 Pilot Step

Before the full launch of the survey, a pilot step will be conducted with a small subset of students to assess the clarity and relevance of the questions. This step helps refine the survey for any ambiguities and ensures the language is appropriate for all respondents.

3.3 Focus Groups

In addition to the surveys, focus groups will be conducted to gather qualitative insights into student attitudes, perceptions, and experiences. This step will allow for a deeper understanding of the emotional and social contexts that influence student performance. Participants will be chosen based on specific criteria such as academic level and involvement in extracurricular activities.

4 Research Approach

4.1 Form 1: Academic and Demographic Information

The first form collects data on the following variables:

- **Demographic Information:** Age, gender, academic level, region of residence, etc.
- **Academic Performance:** Grades from Semester 1 and 2, study habits, and library usage.
- **Mental Health and Social Engagement:** Stress levels, social interactions, mental health status, and engagement with extracurricular activities.

These variables are crucial for understanding how a student's background and academic habits correlate with their performance.

4.2 Form 2: Attitudes, Perceptions, and Deeper Analysis

The second form dives deeper into students' attitudes and perceptions of the school environment. Variables include:

- **Attitudes:** How students feel about their school, teachers, and peers.
- **Perceptions of Negativity:** How prevalent negative feelings are within the student body.
- **Behavioral Indicators:** Social behavior patterns and how they affect academic life.
- **Community Support:** How much students rely on or contribute to the ENSSEA community.

The insights gathered from this form will help uncover deeper behavioral patterns and the emotional climate within ENSSEA.

5 Data Analysis

5.1 Quantitative Analysis

Quantitative data will be drawn from survey responses, focusing on variables such as stress levels, academic performance, and social engagement. Statistical techniques like correlation analysis, regression analysis, and clustering techniques will be employed to identify patterns and relationships between these variables. Control variables such as academic level and field of interest will be used to isolate the effects of the environment on grades.

5.2 Qualitative Analysis

The qualitative data from open-ended survey responses and focus group discussions will be analyzed thematically. Key themes related to student perceptions of the academic environment, mental health, and social engagement will be identified. Special attention will be given to understanding the spread of negativity within the school community and proposing solutions for fostering positivity.

5.2.1 Tools for Qualitative Data Analysis

- **NVivo:** Used for organizing, coding, and visualizing qualitative data.
- **MAXQDA:** Another tool for coding and analyzing qualitative research.
- **Atlas.ti:** Helps researchers manage, code, and analyze large amounts of qualitative data.

5.2.2 Methods of Qualitative Analysis

Interviews: One-on-one conversations where open-ended questions are asked to gather in-depth insights into a person's experiences or opinions.

Focus Groups: Group discussions where a moderator leads a conversation on a specific topic to gather multiple perspectives.

Observations: Directly observing participants in their natural setting without interference, to capture authentic behaviors or interactions.

Content Analysis: Analyzing text, images, or media content (like articles, videos, or social media) to identify patterns or themes.

Case Studies: In-depth analysis of a single event, group, or individual over time, providing detailed insights into the subject.

Ethnography: Extended observation and immersion in a particular culture or group, often over an extended period, to understand their practices and worldview.

6 Conclusion

This study is expected to provide valuable insights into how different aspects of the educational environment at ENSSEA influence student performance, mental health, and social interactions. By understanding these factors, we can make recommendations for improving the academic experience and fostering a more positive school culture.