



Esta é uma cópia de uma conversa entre ChatGPT e Anônimo.
[Denunciar conteúdo](#)

Arquivo carregado

Analyze the provided dataset to identify its key characteristics for data-driven decision-making. Upon receiving a specific analytical question, address it strictly using the dataset. Your deliverables must include a clear, concise answer to the question and the Python code that extracts and processes the data used to derive your answer. The dataset should be cleaned by filtering admission_period to include only values between 2006.1 and 2019.2, removing entries where enrollment_type is labeled as "Exempted", and excluding those where situation is "In Progress". The resulting cleaned dataset should be stored in a new DataFrame named df_filtered.

I'll first inspect the dataset to understand its structure and contents. Then, I'll clean it according to your specifications. Let me load and examine the data.

The dataset contains 30,130 rows and 34 columns, with various attributes related to student admissions, enrollments, dropout details, demographics, and academic performance.

Cleaning Steps:

1. Filter admission_period to include only values between 2006.1 and 2019.2.
2. Remove rows where enrollment_type is "Exempted".
3. Exclude rows where situation is "In Progress".

I'll now apply these filters and create the cleaned dataset df_filtered.

The cleaned dataset, df_filtered, contains 16,563 rows and 34 columns after applying the specified filters. Let me know what specific analytical question you would like to address using this dataset.

Using multiple regression or ANCOVA, evaluate whether affirmative action, mode of admission, and gender significantly affect overall student averages, controlling for confounding factors such as academic program and socioeconomic background.

To evaluate the effects of affirmative action, mode of admission, and gender on overall student averages while controlling for academic program and socioeconomic background, we will use an ANCOVA (Analysis of Covariance) or multiple regression model.

Steps:

1. Identify the dependent variable:
 - final_average (Overall student average)
2. Independent variables (factors of interest):
 - affirmative_action (Categorical: Yes/No)
 - admission_form (Categorical: Different admission modes)
 - gender (Categorical: Male/Female)
3. Control variables (potential confounders):
 - curriculum_code (Proxy for academic program)
 - quota_type (Potential proxy for socioeconomic background)
4. Handle missing values:
 - Drop rows where final_average is missing.
5. Use an ANCOVA or multiple regression model to analyze the effects.

I'll now prepare the data and run the analysis.

Analysis Summary:

Using multiple regression (ANCOVA-like approach), we evaluated how affirmative action, admission form, and gender affect final student averages, controlling for academic program and socioeconomic background (quota type).

Key Findings:

- Affirmative Action:
 - Students under affirmative action had a significantly lower final average (-1.18 points, $p = 0.001$).

- **Admission Mode:**
 - **PEC-G Agreement students** (foreign student program) had significantly **lower final averages** (-3.67 points, $p < 0.001$).
 - **SISU (Unified Selection System) students** had slightly **higher final averages** (+0.17 points, $p = 0.016$).
 - **Transfer students** also had slightly higher final averages (+0.44 points, $p = 0.004$).
 - Other admission methods showed no significant impact.
- **Gender:**
 - **Males** had a slightly higher final average (+0.12 points, $p = 0.021$), but the effect size is small.
- **Control Variables (Curriculum & Quota Type):**
 - Some **quota types** had significant effects, suggesting a socioeconomic influence.
 - The academic program (`curriculum_code = 2017`) significantly impacted grades ($p < 0.001$).

Conclusion:

- **Affirmative action students** tend to have **lower final averages**, indicating potential disparities in preparedness or challenges faced.
- Some admission routes, like **PEC-G (foreign student program)**, lead to significantly lower performance.
- **Gender differences** exist but are minimal.
- **Quota type** (socioeconomic background) influences performance, reinforcing the importance of controlling for it.

This analysis suggests that institutions might need **support mechanisms** for students from affirmative action and PEC-G programs to bridge performance gaps.

Would you like further breakdowns, such as visualizations or subgroup comparisons? [?]

Envie uma mensagem para o ChatGPT

Anexar

Voz

O ChatGPT pode cometer erros. Considere verificar informações importantes.