**Project**

Exploring the probabilities of being admitted to university in Chile based on socioeconomic and academic attributes

**Authors**

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**Description of data**

The data used corresponds to the University Admission process in Chile during 2018.

The dataset includes:

* 4 background variables – gender, family income, parents’ education, and type of high school.
* 3 academic performance variables – GPA, PSU Math, and PSU Language
* 1 admission status variable – being enrolled or not in one university.

**Research questions**

1. What is the contribution of academic performance and socioeconomic background variables to the probability of being admitted at the university in Chile?

1.1 What is the single contribution of each predictor (academic performance and socioeconomic background)?

1.2 Is there any difference in probability of being admitted at the university according to socioeconomic status among students?

**Type of model proposed**

Binary Logistic Regression. In addition to analyze the estimated probabilities, we will also explore the effect size of the predictors via Odds Ratios.

**Rationale for the model proposed**

To answer our research questions, we need a classification approach. Due to the binary coded dependent variable (0 = not admitted, 1 = admitted), a binary logistic regression model is appropriate to avoid some of the problems of using a multiple linear regression.