

# Predicting risk of drug consumption based on personality features, demographic variables and previous consumption.

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Square of 7 is 49

## Abstract

Drug consumption and misuse remain significant public health concerns, shaped by an interaction of personality traits, demographic characteristics, and historical behavior. The study employs a variety of predictive models (logistic regression, lasso, random forest, and Xgboost) to analyze the relationships between this personality factors, demographic variables, and drug consumption patterns, aiming to identify significant predictors for the risk of future drug use. The participants were classified as 'consumer' or 'non-consumer.' XGBoost baseline achieve the best performance with a recall of 84.3

## Importing and using libraries

```
age gender education country ... ascore cscore impulsive ss 0 0.49788 0.48246 -0.05921 0.96082 ... -0.91699
-0.00665 -0.21712 -1.18084 1 -0.07854 -0.48246 1.98437 0.96082 ... 0.76096 -0.14277 -0.71126 -0.21575 2 0.49788
-0.48246 -0.05921 0.96082 ... -1.62090 -1.01450 -1.37983 0.40148 3 -0.95197 0.48246 1.16365 0.96082 ... 0.59042
0.58489 -1.37983 -1.18084 4 0.49788 0.48246 1.98437 0.96082 ... -0.30172 1.30612 -0.21712 -0.21575
[5 rows x 12 columns]
```