Drug Consumption Risk

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Data : https://archive.ics.uci.edu/ml/datasets/Drug+consumption+%28quantified%29

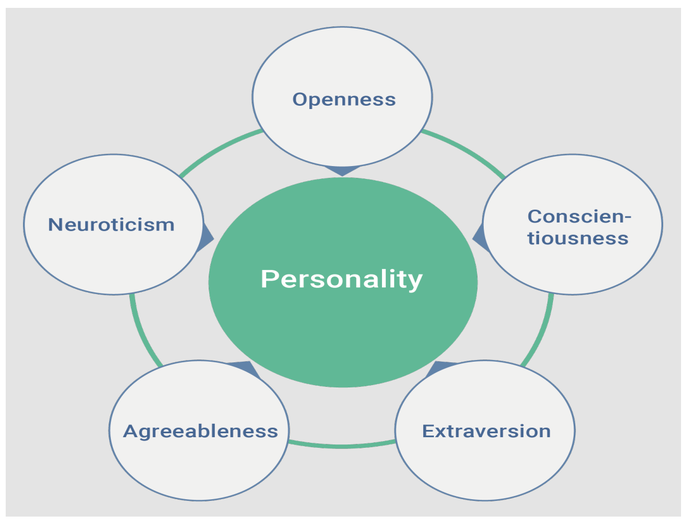
According to World Drug Report, almost 275 million people have used drugs at-least in 2016. Approximately 31 million people suffer from drug abuse and are in need of medical treatment. In view of this consumption, drug abuse has been converted to important health issue globally. This dashboard tries to find the traits of the people who consume drugs and cluster the drugs based on the user's personality traits.

PERSONALITY TRAITS

Personality traits reflect people's characteristic patterns of thoughts, feelings and behaviors

> This dashboard has used the data from the UCI website which contains the personality traits of about 1800 people around the world along with their consumption pattern of 19 drugs.

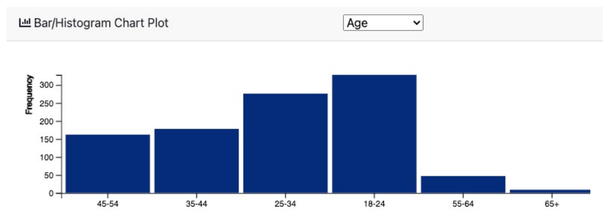
> The personality traits include their background information along with the Big Five Factor model trait score namely Nscore, Escore, Oscore, Ascore and Cscore



BAR/HISTOGRAM PLOT

Bar and Histogram charts have been applied to quantify the data based on numerical/ordinal variables.

This helps to get a quantified number of the datapoints based on the feature selected.



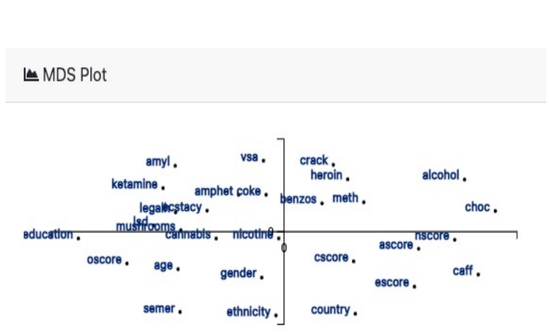
Insights Obtained

- Heavy drugs are mostly dependent on stress and depression.
- Drugs got clustered in two groups mainly on the MDS plot; the Heroin group and the ecstasy group
- Age and Education have good impact on the level of consumption.
- Hedonists and insecures are the most vulnerable to heavy drug consumption.
- High N and low C or A score are more vulnerable to drug consumption.

MDS PLOT

A MDS plot has been included to get the correlation between all the features including ordinal variables.

Ordinal Encoding has been done on the categorical variables with accurate information to quantify them while calculating the correlation.



DATA STATS

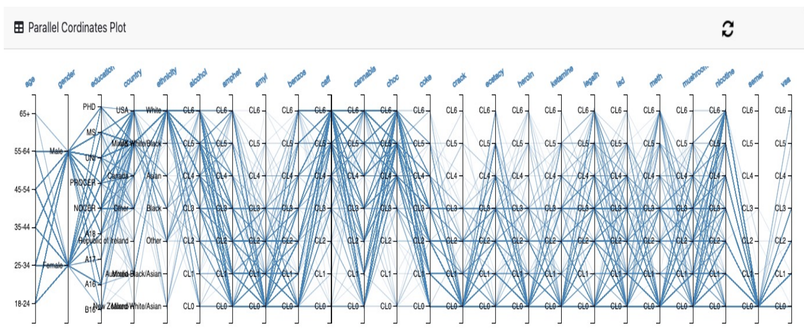
There's live information available about the number of datapoints have been obtained from each country and is placed with pointers on the globe. This gets updated as soon as new data comes in.

PCP PLOT

A PCP plot has been included to get a total overview of all the data.

Brushing and linking has been implemented with other plots to get a detailed information.

The strength of the lines are depicted using the opacity. The plot contains information about all the ordinal features in the dataset.



SCATTER PLOT MATRIX

A Scatter plot matrix of the drugs on Y-axis and all the trait scores on X-axis. This helps to find the change of trait scores for users with higher consumption.

Comparing the trait scores is the main agenda behind this dashboard, and most of our insights are obtained from this plot.