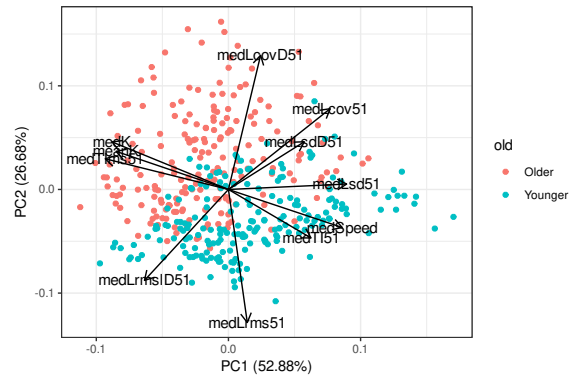


PCA projection

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Description

Give n numeric columns, this method computes principal component analysis and creates a projection by using the first two principal components.

Parameters

Plot properties

- *Colour*: categorical variable to colour the points in the projection.
- *Scale*: “a logical value indicating whether the variables should be scaled to have unit variance before the analysis takes place”.
- *Biplot*: whether a biplot should be displayed according to the loadings.

Figure properties

- *Width*: width of the visualization in centimeters.
- *Height*: height of the visualization in centimeters.
- *Title*: Title of the visualization.

Result

A visualization in pdf format.

Constraints

- The columns should be numeric values.

Implementation

To estimate the principal components, the `prcomp` function is used. The projection is done via the `ggplot2` and `ggfortify` packages. The final plot is rendered by using the `tikzDevice` package and latex.