

HUDM5124 -- Week 2 assignment: PCA [ALTERNATE VERSION]

In this Canvas module is posted a multivariate data set ("fatality.sav") on auto fatality rates, representing the correlations among six variables measured on a sample of 50 states.

The variables are:

State	name of state
frate	fatalities per 100M vehicle miles driven
drink	min drinking age
gasuse	gasoline use
drivers	total number of drivers (M)
density	population density
temp	mean January daytime low temp

Run a PCA, with varimax rotation (and default parameters otherwise) on these variables. Print out ONLY the derived eigenvalues (and a scree plot) and the rotated components matrix.

Discuss how many components you think should be extracted. Write a brief interpretation of each *rotated* component.

Use SPSS, R, or any other stat package you prefer.