

Case Study: Data Set 2

Factors Affecting Systolic Blood Pressure (SBP)

The objective of this study is to determine which are factors have impact on systolic blood pressure (SBP).

The data file contains 500 observations (subjects)

Variable	Description
Systolic Blood Pressure (SBP)	Continuous response variable
Gender	Binary Variable: M = Male, F = Female
Marital Status	Binary variable: Y = Married, N = Not Married
Smoking Status	Binary variable: Y = Smoker, N = Non-Smoker
Age	Continuous variable (years)
Weight	Continuous variable (lbs)
Height	Continuous variable (inches)
Body Mass Index (BMI)	Continuous variable: $(\text{Weight} / \text{Height}^2) \times 703$
Overweight	Categorical variable: 1 = Normal, 2 = Overweight, 3 = Obese.

Race	Categorical variable taking values 1, 2, 3, or 4.
Exercise level	Categorical variable: 1 = Low, 2 = Medium, 3 = High
Alcohol Use	Categorical variable: 1 = Low, 2 = Medium, 3 = High
Stress Level	Categorical variable: 1 = Low, 2 = Medium, 3 = High
Salt (NaCl) Intake Level	Categorical variable: 1 = Low, 2 = Medium, 3 = High
Childbearing Potential	Categorical variable: 1 = Male, 2 = Able Female, 3 = Unable Female
Income Level	Categorical Variable: 1 = Low, 2 = Medium, 3 = High
Education Level	Categorical Variable: 1 = Low, 2 = Medium, 3 = High
Treatment (for hypertension)	Binary Variable: Y = Treated, N = Untreated