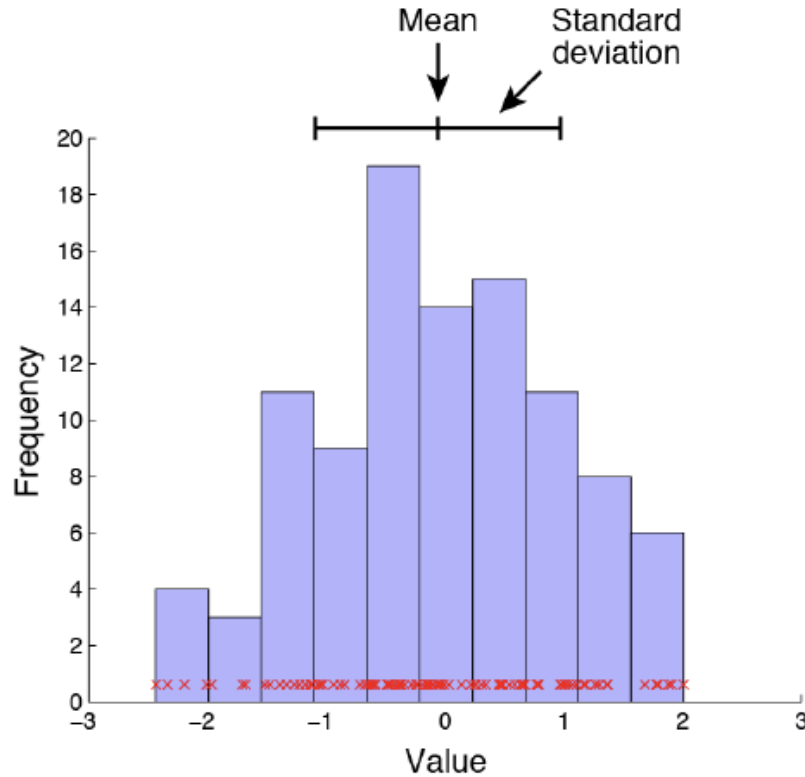
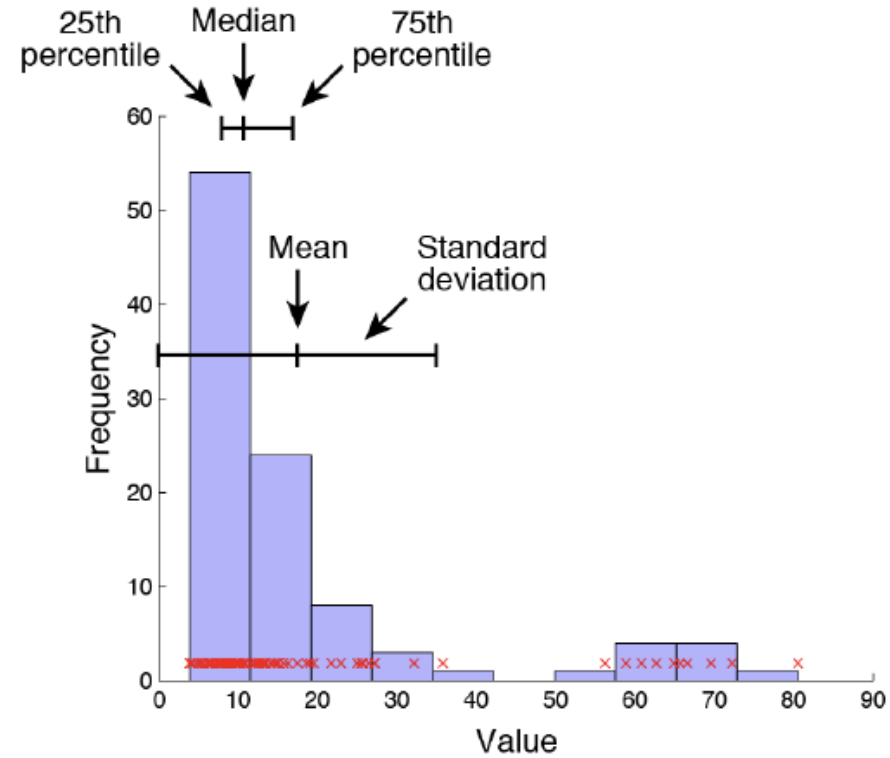


# Descriptive statistics

## Histogram of normal data

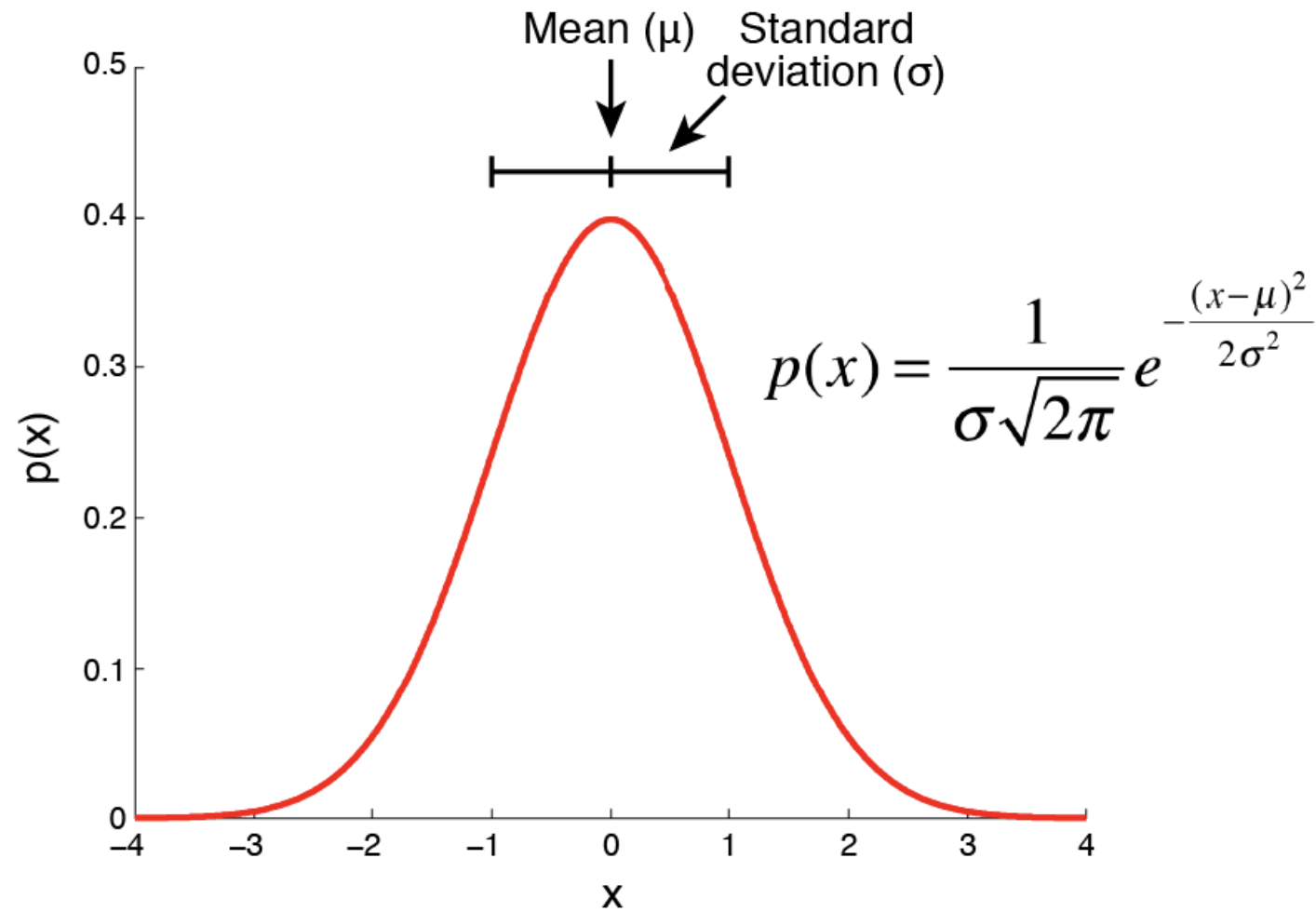


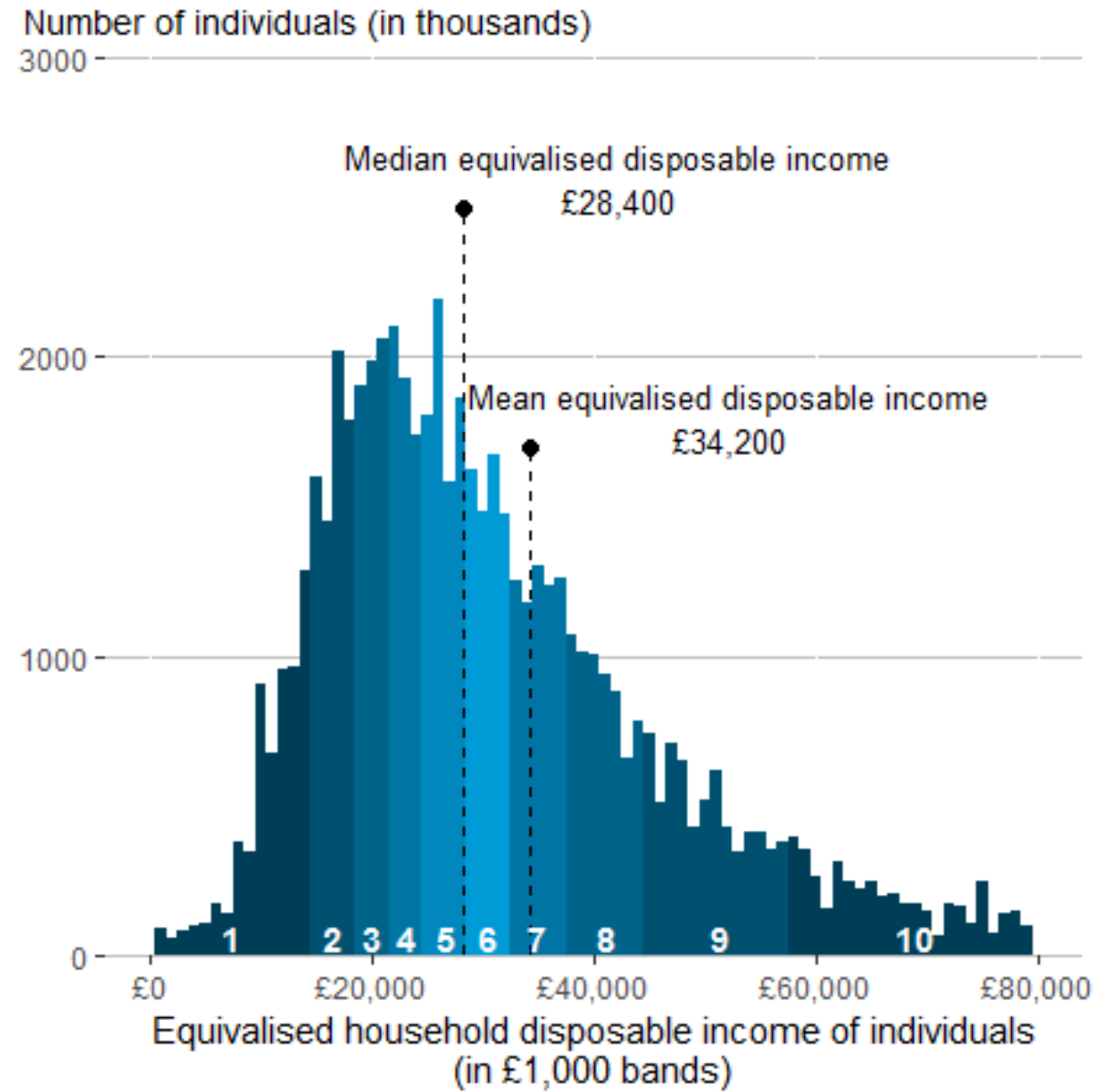
## Histogram of non-normal data



$$\text{mean}(x) = \bar{x} = \frac{\sum_{i=1}^n x_i}{n} \quad \text{std}(x) = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n-1}}$$

# Gaussian probability distribution

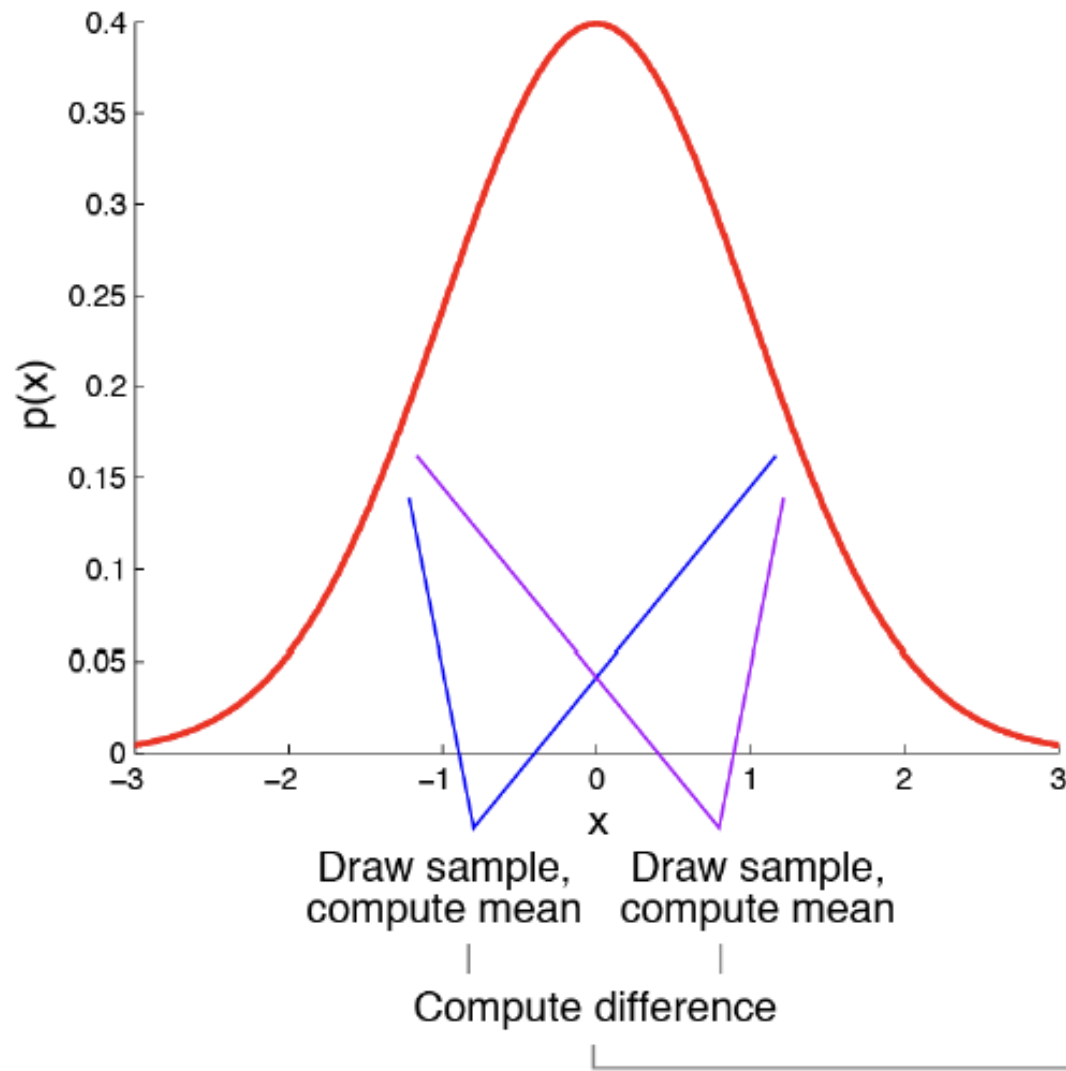




Data from 2018; Source: Office for National Statistics, UK

# Hypothesis testing

## Distribution under null hypothesis



## Sampling distribution of difference in means

