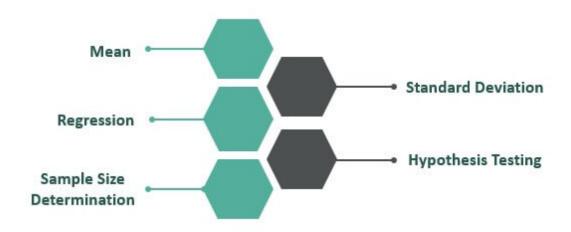
## An Statistical Manual Book For Data Analysis in R

# **Methods of Statistical Analysis**





#### Submitted by

Manasvi Lamichhane BSC Medical Science

White House College PutaliSadak, Kathmandu

## Contents

1	Acr	conyms	iv		
2	Background				
	2.1	Introduction	1		
	2.2	Objectives	1		
		2.2.1 General Objectives	1		
		2.2.2 Specific Objectives	1		
	2.3	Limitations	1		
3	${ m Lit}\epsilon$	erature Review	2		
4	Me	thodology	3		
	4.1	Study Area	3		
	4.2	Data Collection	3		
		4.2.1 Primary Data	3		
		4.2.2 Secondary data	3		
	4.3	Data Anlayis	3		
		4.3.1 Descriptive	3		
		4.3.2 Statistical Anlaysis	3		
5	5 Result				
6 Discussion					
7	Cor	nclusions	8		
$\mathbf{R}$	efere	ence	9		

## List of Tables

1	The Data source	3
2	The Summary Iris data	3

# List of Figures

1	Statistical Analysis	4
2	Satsitical Analysis in R	4
3	The distribution of Sepal Length in Species	ļ

# 1 Acronyms

### 2 Background

#### 2.1 Introduction

The medical science is very crucial for modern health problems Collins (2001). The basic science is started from early 1800 (Parajuli et al., 2022).

#### 2.2 Objectives

#### 2.2.1 General Objectives

The overall objectives of the study is to determine whether the temperature has its significant effect on plant growth.

#### 2.2.2 Specific Objectives

To fulfill the general objective of the study following specific objectives are designed.

- 1. specific objective 1
- 2. specific objective 2
- specific objective 1
  - specific objective 1.1
  - specific objective 1.2
- specific objective 2

#### 2.3 Limitations

**BOLD** is favorite format.

Italic is less favorite

**BOLDitalic** is less used.

<u>Underlined statement</u>

3 Literature Review

## 4 Methodology

### 4.1 Study Area

#### 4.2 Data Collection

#### 4.2.1 Primary Data

#### 4.2.2 Secondary data

Table from latex script

Table 1: The Data source

s.n.	Primary Data	Secondary Data
1	Questionnaire Survey	Articles
2	Focus Group Discussion	Published National Reports

### 4.3 Data Anlayis

Table 2: The Summary Iris data

Species	Number of Samples	$Mean\ Sepal\ Length(cm)$	Mean Petal Length (cm)
setosa	50	5.006	1.462
versicolor	50	5.936	4.260
virginica	50	6.588	5.552

In the figure, the mean sepal length of setosa species is 5.006.

#### 4.3.1 Descriptive

#### **Another Method**

```
knitr::include_graphics("figures/stat.jpg")
```

#### 4.3.2 Statistical Anlaysis

#### head(iris)

	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
1	5.1	3.5	1.4	0.2	setosa
2	4.9	3.0	1.4	0.2	setosa
3	4.7	3.2	1.3	0.2	setosa
4	4.6	3.1	1.5	0.2	setosa
5	5.0	3.6	1.4	0.2	setosa
6	5.4	3.9	1.7	0.4	setosa

# **Methods of Statistical Analysis**

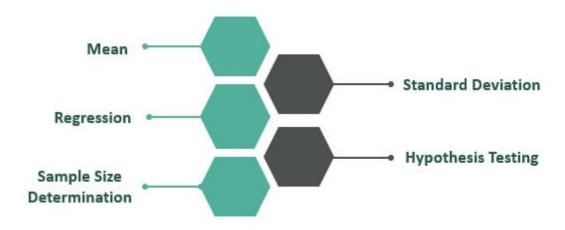




Figure 1: Statistical Analysis

#### **Methods of Statistical Analysis**

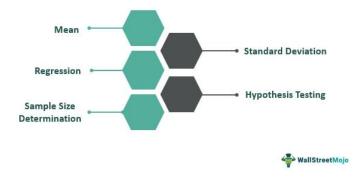


Figure 2: Satsitical Analysis in  ${\bf R}$ 

```
iris %>%
  ggplot(aes(x = Sepal.Length)) +
  geom_histogram(bins = 30, color = "black", fill = "blue") +
  facet_wrap(~Species) +
  labs(x = "Sepal Length", y = "Frequency") +
  theme_bw()
```

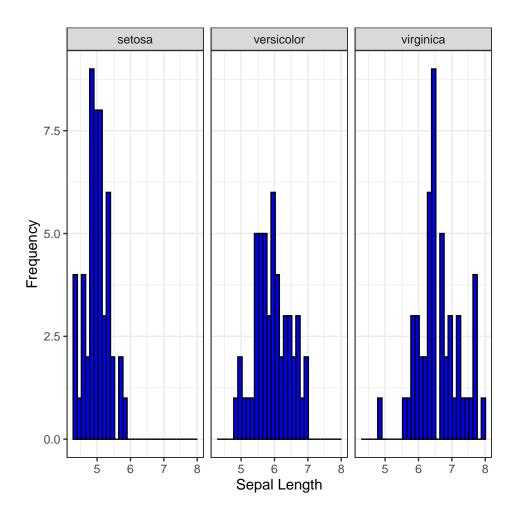


Figure 3: The distribution of Sepal Length in Species

## 5 Result

# 6 Discussion

$$\overline{X} = \frac{\sum X_i}{N}$$

The formula for volume is  $V = L \times B$ .

$$V = L \times B \tag{i}$$

$$x = \frac{-b + \sqrt{b^2 - 4ac}}{2ab} \tag{ii}$$

$$r_{xy} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

## 7 Conclusions

## Reference

Collins, F. S. (2001). Implications of the Human Genome Project for Medical Science. *JAMA*, 285(5), 540. https://doi.org/10.1001/jama.285.5.540

Parajuli, A., Gautam, A. P., Sharma, S., Lamichhane, P., Sharma, G., Bist, B. S., ... Basnet, R. (2022). A strategy for involving community forest managers in effective forest fire management in nepal. *Banko Janakari*, 32(1), 41–51. https://doi.org/10.3126/banko.v32i1.45476