This chapter provides an overview of the significant aspect of the various stages of the study

**Study in retrospect**

Various aspect of the present study like the problem, variables, objectives and hypothesis are reviewed retrospectively

**Restatement of the problem**

The present study is entitled as **data literacy among post graduate students in Calicut district**

**Variables**

* Data literacy
* Classificatory variables
* Gender
* Locale of the college
* Subject of specialization
* Type of management of the college

**Objectives**

* To know the extent of data literacy among post graduate students
* To test whether there exist any significant difference in the level of students in post graduate level regarding the data literacy in the following sub samples
* Gender
* Locale of the college
* Type of management of the college
* Subject of specialization

**Hypothesis**

* There will be significant difference in the level of data literacy among post graduate students on the basis of
* Gender
* Locale of the college
* Type of management of the college
* Subject of specialization

**Methodology**

Methodology deals with the description of sample, tool, statistical techniques used for the study

**Sample**

The population of the study is post graduate students at arts and science colleges in Calicut district, and hence the study was conducted in 600 post graduate students drawn from different post graduate colleges under Calicut University in Calicut district. The sample were selected by stratified sampling technique giving due representation to gender, locale of the college, type of management, subject of specialization

**Data literacy test**

The data literacy among post graduate students in arts and science colleges was measured using data literacy test .this was constructed by the investigator with the help of the super wising teacher. This test will be consisted of 50 multiple choice test items with four options under four dimension

**Statistical techniques**

Statistical techniques proposed to be used are

* Preliminary analysis
* Percentiles
* Test of significant difference between means for large independent sample
* One –way ANOVA

**Major findings**

Following are the major findings obtained after analysis of the collected data

* The mean score obtained for the data literacy test is less than neutral value which means that extent of data literacy among post graduates are not satisfactory to certain extent
* Extent of data literacy for male and female post graduate students shows that data literacy is high in female than male
* Extent of data literacy for urban and rural post graduate students shows that rural college students posses more data literacy than urban colleges
* Extent of data literacy among post graduate students based on subject , from science ,arts, commerce and language is 27.58, 21.67, 23.76 , 20.59 .It reveals that science students posses more data literacy than other subjects. language students and arts students have minimum level of data literacy
* Extent of data literacy among post graduate students based on type of management of the college government, aided, and unaided is 24.39, 24.54 and 21.37.It indicates that aided college students posses more data literacy. un aided college students have low level of data literacy
* Based on gender data literacy among post graduate students differs significantly (t: 3.47).It implies that there is a significant difference between males and females post graduate students in their data literacy score.
* Based onlocale of the college data literacy among post graduate students did not differs significantly (t: 1.419).It implies that there no significant difference between rural and urban post graduate college students in their data literacy score.
* Based on subject of specialization post graduate student differ significantly(F: 52.757) (3,596) degrees of freedom at 0.01 level of significant .It reveals that there exist no significant difference in language and arts but there exist significant difference in t language and commerce. In language and science also there exists significant difference. Arts and commerce, Arts and science subject also have significant difference. There exists significant difference in commerce and science subject also.
* Based on type of management of the college post graduate students differ significantly(F:13.990) for (2,597) degrees of freedom at 0.01 level of significant .This shows that data literacy differ significantly among post graduate students from government, aided and unaided colleges

**Conclusion**

Based on investigation the investigator reached the following conclusions

* Extent of data literacy among post graduate students not satisfactory to certain extent
* Based on gender, data literacy among post graduate students differs significantly. Female post graduate students have more data literacy than males in post graduate students
* Based on locale of the college, the post graduate students did not differ in their level of data literacy. Rural college students posses more data literacy than rural post graduate students
* Regarding government, aided, unaided colleges, data literacy differ significantly among post graduate students
* Data literacy differs significantly among post graduate students based subject of specialization. Science post graduate student have better data literacy than commerce, language and arts students. Language students have low level of data literacy than compared to others

**Educational implications**

The present study provides a vivid picture of the data literacy among post graduate students. The value of the research lies in its implication

The result of analysis shows that data literacy among post graduate students is satisfactory to certain extent. Hence importance should be given to include the concept of data literacy in the curriculum for upgrading data literacy capacity of college students

From the analysis based on gender shows that the supremacy of female over males in their data literacy score. There for concentration given to the male students

The rural college students possess more data literacy than urban college students. So environment should change, among the urban students for improving data literacy level

Science student’s posses more data literacy than any other subject’s .This is because they are familiar with data in their academic program.

The following concrete suggestion can be taken in the educational scenario in order to improve data literacy among students

* Include content, problems and situation relating to the data calculation to the curriculum
* Conduct quiz programme in a competitive way to make awareness about data analysis method
* Students can give training in familiar with data
* Curriculum reformers can include learning module and activities to improve the data literacy of students of under graduate, post graduate level
* Provide digital tools to share information
* Arts and language student’s posses low data literacy. There for in curriculum must add more activities and learning experience that improve data literacy among students

Post graduate students have different opportunities in future. They must face many competitive examinations after completing the course. So awareness of data literacy is relevant in post graduate level

**Suggestion for further research**

* A study can be conducted to design a module to improve the data literacy of students at post graduate level
* A study can be conducted to understand the relationship between data literacy and research aptitude
* Data literacy of the teachers can be checked