

## **IMPORTANCE OF STATISTICS**

The word statistics is derived from the Latin word “status”, the Italian word “state”, and the German word “Statistics” meaning a political state. In the ancient times it was used to understand the political arrangement of all states of the known world. Its use has now been broadened. There is hardly any branch of discipline which does not make use of statistics. Though, it may be used in different subjects, yet it has the following functions to render:

1. It presents facts in a definite form
2. It simplifies mass of figures
3. It facilitates comparison
4. It helps in formulating and testing hypothesis
5. it helps in prediction

Everybody comes across certain behavioural or other human characteristics which need to be quantified in order to comprehend the complexity involved in it. Statistics helps to break down the complexity of facts to more meaningful information by analyzing, comparing and evaluating. Statistics, though essential to be used in all aspects of life. The present day research does not find its meaning unless and until the responses in the form of data are analyzed with the help of certain statistical techniques. Statistics though essential to be used in all aspects of life, but we make its use even without understanding the real meaning and importance when we:

- a. count the items of grocery bought in the beginning of every month
- b. make a list of people residing near one’s household
- c. count the clothes to be given for dry cleaning
- d. prepare a list of the persons to be invited for attending the party at our place and then count how many of them have attended the programme...etc

Though the basic statistics to be used in any discipline of enquiry remains to be same, still certain statistical techniques are particularly related to application in specific branches. Now, it can be summarized as to how and why the knowledge of statistics is important for the students of education and psychology

1. Statistics helps in understanding the related research literature in these subjects. Almost all books and research journals describe the procedure for treatment and analysis of data with the help of statistical techniques.
2. It forms the bases of scientific approach to problem solving. The students cannot carry out their researches without knowing the scientific method of approach to problem solving in their disciplines.

3. It help the psychologists, counsellors, educationists and guidance workers to make an effective appraisal of student ability and interest in the studies and for their placement in jobs.
4. It works as a basic tool of data analysis and provide information to educationists and educational planners about the trend of enrolment in various classes, literacy rate, drop out, teacher-pupil ratio, number of students passing an examination etc.
5. It help the teachers and school administrators to evaluate the strategies involved in teaching-learning process. This information can be more objectively gained with the help of statistics to deal with examination scores, test scores, etc, to understand the impact of evaluation.
6. Statistics help us to draw general conclusions.
7. In the discipline of education and psychology, responses of the individuals are quantified which can be translated to have a precise meaning. It helps us to describe, summarize and interpret meaning of performance of different individuals in any task in a group. It helps us to study relationships between different characteristics or phenomenon or variables of the aggregate of people or population.
8. It enables us to summarize the results in a more meaningful and convenient form.
9. It permits the most exact kind of description.
10. It helps in understanding events or characteristics of human behavior occurred in past, in present on variety of tasks in human life. It also helps us in predicting the future performance of the students in a course or success in a job.
11. It forces us to be definite and exact in our thinking and procedure to be adopted in making the concepts clear.
12. However, even if one will never be a researcher himself/herself, he would like to have his acquaintance with certain topics, because his profession desires him to apply research literature. He will be required to comprehend and evaluate detailed research literature, much of which is couched in statistical terms.