

Learn Statistics

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It is important to learn statistics because so many of the decisions that we make in everyday life are based on statistics. People may not realize, but statistics permeates most of the decision making we do each day. Everyone has an intuitive understanding of the principles of statistics but it greatly helps to understand the concepts formally.



The banner features the Explorable logo at the top center, with the text "EXPLORABLE" in a large, bold, sans-serif font and "Quiz Time!" in a smaller, cursive font below it. Below the logo are three square images, each with a caption underneath. The first image shows a pair of red roller skates on a wooden deck, with the caption "Quiz: Psychology 101 Part 2". The second image shows a fan of colorful pencils, also with the caption "Quiz: Psychology 101 Part 2". The third image shows a Ferris wheel at sunset, with the caption "Quiz: Flags in Europe". To the right of these images is a link that says "See all quizzes =>".

A Practical Example

For example, imagine a scientific study that aims to find earth-like planets in hope to find life elsewhere in the universe. This is a tricky study with various uncertain parameters. The best that can be done is to do a thorough statistical analysis and see which planets have the greatest potential.

A very crude analysis would take just the number of stars in the universe. However, not all stars have planets around them. Thus a step further in the statistical analysis would be to consider only those stars with planets orbiting them.

With the advent of more powerful telescopes and better resolution images of the universe, we are able to spot the size and distance of the planets as well. Thus now scientists are interested only in those planets that are approximately the size of the earth at approximately the same distance from their stars as earth is from the sun. Still, there seem to be billions of earth-like planets just in our galaxy.

The above example illustrates why it is important to learn statistics. Not everything is intuitively obvious to us and a simple study of statistics will go a long way in helping you make proper decisions about your life.

Making Sense of the World Around

It also helps to learn statistics because so much of what we speak about involves statistics even if the person doesn't know a lot about it. All polls contain a confidence interval [1] that we loosely know to be a measure of how sure the pollster is about extrapolating [2] the results of the poll or survey. We hear about weather forecast like “there is a 25% probability that it will rain today” and we understand what it means and decide whether we need to carry our umbrella to work or postpone the picnic that we planned for our family.

When you learn statistics [3], you will be able to understand the deeper meaning of these concepts, which will again help you make more sense of the world that we live in. Almost all the principles that we follow are based on data and statistics and it would greatly help to understand the inner meaning behind the numbers.

Today, statistics is increasingly becoming important in a number of professions, and people from all walks of life actively use statistics, from politicians and business leaders to engineers and biologists.

Source URL: <https://explorable.com/learn-statistics?gid=1589>

Links

[1] <https://explorable.com/statistics-confidence-interval>

[2] <https://explorable.com/what-is-generalization>

[3] <http://davidmlane.com/hyperstat/>