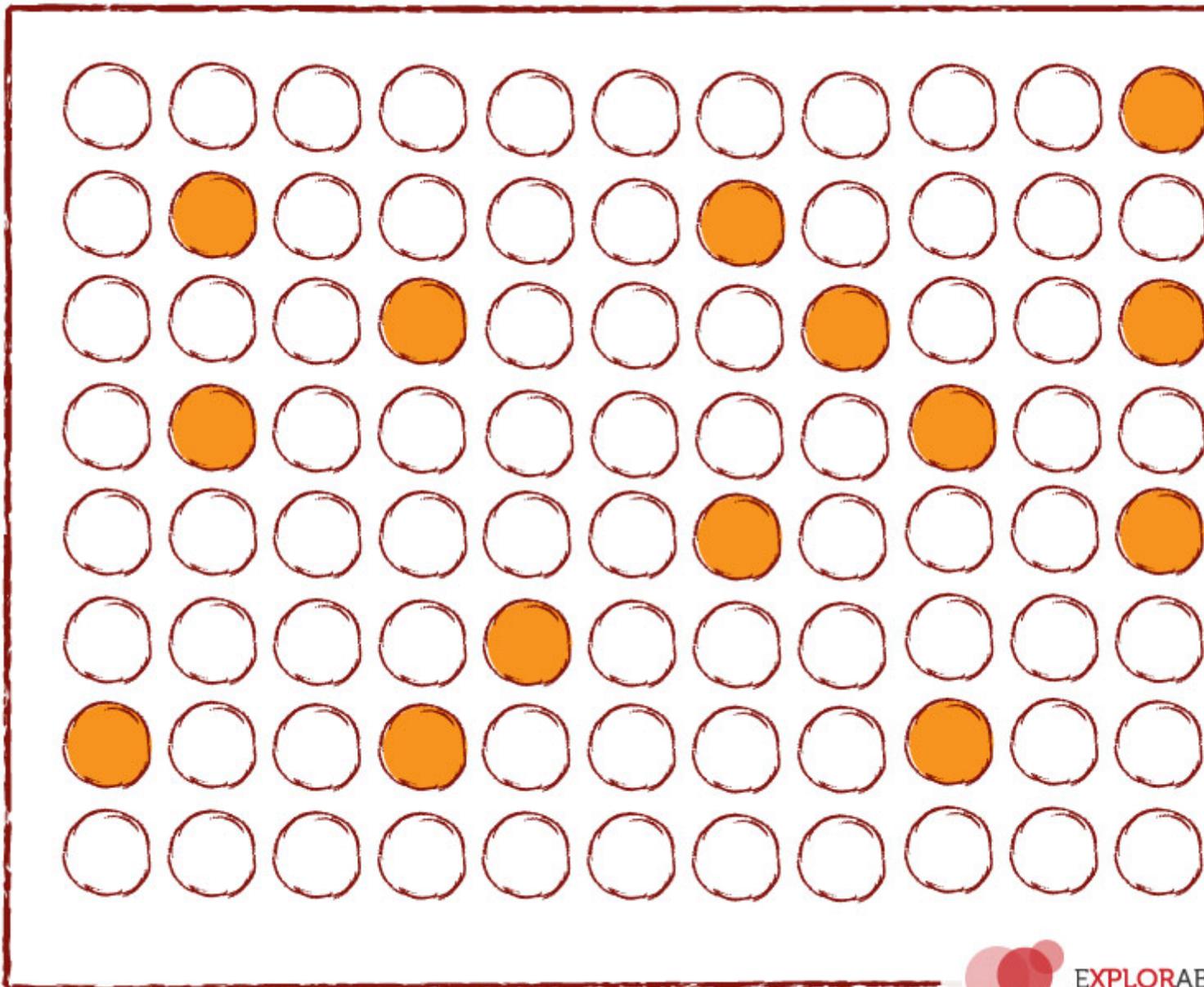




Random Sampling

Explorable.com 421.6K reads

Random sampling is one of the most popular types of random or probability sampling.



Random Sampling, Explorable

In this technique, each member of the population has an equal chance of being selected as subject. The entire process of sampling is done in a single step with each subject selected

independently of the other members of the population.

There are many methods to proceed with simple random sampling. The most primitive and mechanical would be the lottery method. Each member of the population is assigned a unique number. Each number is placed in a bowl or a hat and mixed thoroughly. The blind-folded researcher then picks numbered tags from the hat. All the individuals bearing the numbers picked by the researcher are the subjects for the study. Another way would be to let a computer do a random selection from your population. For populations with a small number of members, it is advisable to use the first method but if the population has many members, a computer-aided random selection is preferred.



The banner features a bright orange background. At the top center is a white icon of a flask with a flame, followed by the word "EXPLORABLE" in a white, sans-serif font. Below this, the phrase "Quiz Time!" is written in a white, cursive script. Three white-bordered rectangular boxes are arranged horizontally. The first box contains a photograph of a pair of red roller skates on a wooden deck, with the text "Quiz: Psychology 101 Part 2" below it. The second box contains a photograph of several colorful pencils fanned out, with the text "Quiz: Psychology 101 Part 2" below it. The third box contains a photograph of a Ferris wheel at sunset, with the text "Quiz: Flags in Europe" below it. In the bottom right corner of the banner, the text "See all quizzes =>" is written in white.

Advantages of Simple Random Sampling

One of the best things about simple random sampling [1] is the ease of assembling the sample. It is also considered as a fair way of selecting a sample from a given population since every member is given equal opportunities of being selected.

Another key feature of simple random sampling is its representativeness of the population. Theoretically, the only thing that can compromise its representativeness is luck. If the sample is not representative of the population, the random variation is called sampling error [2].

An unbiased random selection and a representative sample is important in drawing conclusions [3] from the results of a study. Remember that one of the goals of research is to be able to make conclusions pertaining to the population from the results obtained from a sample. Due to the representativeness of a sample obtained by simple random sampling, it is reasonable to make generalizations [4] from the results of the sample back to the population.

Disadvantages of Simple Random Sampling

One of the most obvious limitations of simple random sampling method is its need of a complete list of all the members of the population. Please keep in mind that the list of the population must be complete and up-to-date. This list is usually not available for large populations. In cases as such, it is wiser to use other sampling techniques.

Source URL: <https://explorable.com/simple-random-sampling?gid=1578>

Links

[1] <http://stattrek.com//sampling/simple-random-sampling.aspx>

[2] <https://explorable.com/sampling-error>

[3] <https://explorable.com/drawing-conclusions>

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