

Answer on Question #47247 – Math – Statistics and Probability

The data which has been collected for some other enquiry other than the one of immediate interest is called:

Secondary data

Literature

Observation

Primary data

Solution:

We start with the definition of each type of collecting data. Data can be defined as groups of information that represent the qualitative or quantitative attributes of a variable or set of variables.

Primary data means original data that has been collected specially for the purpose in mind. It means someone collected the data from the original source first hand. Data collected this way is called primary data. Primary data has not been published yet and is more reliable, authentic and objective. Primary data has not been changed or altered by human beings; therefore its validity is greater than secondary data. An advantage of using primary data is that researchers are collecting information for the specific purposes of their study. In essence, the questions the researchers ask are tailored to elicit the data that will help them with their study. Researchers collect the data themselves, using surveys, interviews and direct observations (such as observing safety practices on a shop floor).

Then we consider the Secondary data collection. This type of collecting data is referred to using already existing data in order to analyze, to provide interpretations or to use the data directly for evidence-based decision making. Newspapers usually cannot afford gaining statistical information by their own and make use of reliable data sources. Policy-makers, researchers or the citizens also rely on statistical information from primary data collections and use it for their own purposes. There are several types of secondary data. They can include information from the Census, a company's health and safety records such as their injury rates, or other government statistical information such as the number of workers in different sectors across Canada. Secondary data tends to be readily available and inexpensive to obtain. In addition, secondary data can be examined over a longer period of time. For example, we can look at a company's lost-time rates over several years to observe trends. In the same Institute study mentioned above, the researchers also examined secondary data. They looked at workers' compensation lost-time claims and the amount of time workers were receiving wage replacement benefits. With a combination of these two data sources, the researchers were able to determine which factors predicted a shorter work absence among injured workers. This information was shared with return-to-work professionals to help improve return to work for other injured workers.

Both primary data and secondary data have their pros and cons. Primary data offers tailored information but tends to be expensive to conduct and takes a long time to process. Secondary data is usually inexpensive to obtain and can be analyzed in less time. However, because it was gathered for other purposes, we may need to tease out the information to find what we are looking for. The type of data researchers choose can depend on many things including the research question, their budget, their skills and available resources.

Now we consider the type of collecting data of observation. Observational data collection method involves not carrying out an experiment but observing without influencing the population at all. Observational data collection is popular in studying trends and behaviors of society where, for example, the lives of a bunch of people are observed and data is collected for the different aspects of their lives. Observations are also used to validate or extend data obtained using other data collection methods. Both unstructured and structured observations are used by researchers. Unstructured observations are most useful in exploratory, descriptive research. Structured observations are used when behaviors of interest are known, and this type of observation often involves the use of an observation schedule (e.g., a checklist).

In turn, the literature is a list of references used in the study, the sources of information that were mentioned in the study or observation.

Based on the above information we can conclude that the type of data which has been collected for some other enquiry other than the one of immediate interest is called Secondary data.