Example of essay on statistics

Sociology, Population



Random Sampling

Simple random sampling is the most widely used statistical tool in large populations, where each unit or sample of a population is considered during analysis. Random sampling is considered to be 'God standard' of all the types of sampling techniques available. The major reason of random sampling being important is that it reduces any possible human bias. This includes bias created in selection of a sample or case to be included in the study sample. This technique represents the entire population, avoiding any possible missing data. The overall technique is simple, accurate and should be used for smaller population size. Generalizability of the entire population is achieved using random sampling and hence is the most preferred sampling technique. The inclusion criteria of this techniques is preferred avoiding missing units from a study population, including all units and generalizing the entire study population.

Although random sampling may have been widely accepted, it is often not used in cases, where the population size is large. The technique can only be implied if the data of the study population is readily available and accurately complete. However acquiring a complete and accurate data may bring in certain difficulties such as, complete access is not likely possible due to privacy policies and permission restrictions. This is eventually time consuming and increases labor value. For the study population, a single list cannot be retrieved. This will increase time and expenses to create a complete list ideal for the final sample size to be studied. Lists to be studied for study may not be readily available and sometimes often are charged, this in turn leads to choosing another sampling technique. Even if successful

completion of listings and necessary data are done, gathering additional information, especially if human population is concerned, both time and money have to be raised.

Collection of accurate data, precision in data maintenance and avoiding human bias can help prevent any possible error in random sampling. Also use of random sampling in only small population size is ideal, avoiding standard error or inaccurate data collection.

References: