## **Types of Sampling**

## PROBABILITY SAMPLING

• *Random Sampling.* Each person in the universe has an equal probability of being chosen for the sample and every collection of persons of the same size has an equal probability of becoming the actual sample.

Simple Random Sampling = sampling without replacement

- Systematic Sampling. A sample constructed by selecting every kth element in the sampling frame. Systematic sampling is more practical in that it is less work and thus provides more information per dollar. It also may reduce error. (The more complex the method, the greater opportunity for error.)
- **Stratified Random Sampling.** Is obtained by separating the population elements into overlapping groups, called strata, and then selecting a simple random sample from within each stratum. Example: Rank order: full professor, associate professor, etc. After this is done a random or systematic sample is drawn within each group.
- Cluster Sampling. A simple random sample in which each sampling unit is a collection or cluster, or elements. For example, an investigator wishing to study students might first sample groups or clusters of students such as classes or dormitories, and then select the final sample of students from among clusters. Also called area sampling. Advantage: saves time and money. Disadvantage: error.

## NON PROBABILITY SAMPLING

Usually can not claim that a sample is representative. Much less complicated, less expensive and can be done at the spur of the moment. Can take advantage of whoever is available.

- *Convenience Sampling.* The investigator chooses the closest live persons as respondents. "Captive audience" sampling. (E.g., using a class of intro to psych students).
- Quota Sampling. Equivalent to a stratified sample with the added requirement that each stratum is generally represented in the sample in the same proportion as in the entire population. (Example: 60% democrats and 40% republicans select a sample of the two

• **Dimensional Sampling**. A multidimensional form of quota sampling. One has to specify all dimensions (variables) or interest on the population and then to make sure that every combination of these dimensions are represented by at least one case.

This method is designed for studies in which only a small sample is desired so that each case drawn can be studied in more detain than is possible in a large-scale study.

- *Purposive Sampling.* The researcher uses his or her own judgment about which respondents to choose, and picks those who best meets the purposes of the study.
- Snowball Sampling. Has achieved increased use in recent years; particularly by researchers conducting observational research and in community studies. Conducted in stages. In the 1<sup>st</sup> stage a few persons having the requisite characteristics are identified and interviewed. These persons are used as informants to identify others who qualify for inclusion in the sample.

The second stage involves interviewing these persons who in turn lead to still more persons who can be interviewed in the 3<sup>rd</sup> stage, etc. The term "snowball" stems from the analogy of a snowball, which begins small but becomes bigger and bigger and rolls downhill. Also called "chain referral sampling." particularly useful in deviant studies and subcultures (drug addicts, etc.).

## Sample Size

- Depends on the size of the population to be sampled.
- Lack of adequate representation can be referred to as sampling error.