Sampling in Qualitative and Quantitative Research

A practical how-to

Key themes

- A famous sampling mistake
- Quantitative assumptions in sampling
- Qualitative assumptions in sampling
- Types of sampling
- Ethnographic sampling
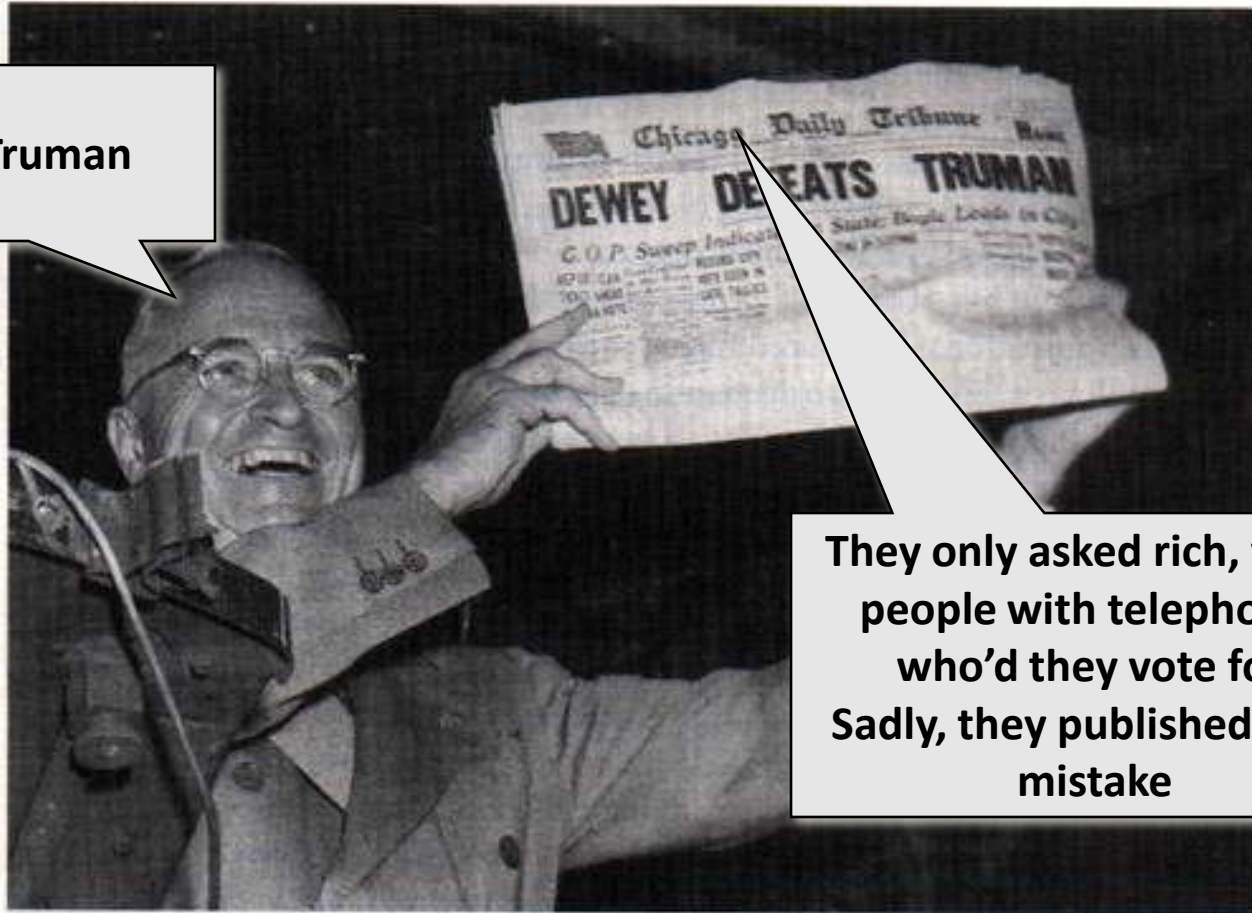- Interview sampling
- Content analysis sampling
- How many?

Copernicus Consulting

A famous sampling mistake

A famous sampling mistake

Even with proper sampling…beware!

"…predicting *behavior* on the basis of knowledge of *attitude* is a very hazardous venture." Meaning, predicting social behavior is often misguided. Keep that in mind!

1948 Votes in the Making— A Preview

BY HELEN DINERMAN

This article is a preview from the findings of the 1948 Election Study, conducted by Chicago, Columbia, and Cornell Universities.

Early in 1948, Paul F. Lazarsfeld, Bernard Berelson, and Elmo C. Wilson, all of whom had been directly concerned with the election study conducted in Erie County, Ohio, during the 1940 presidential campaign, decided to repeat and elaborate that study during the 1948 campaign, and to formulate plans for a continuing study of voting behavior. Accordingly, a group of interested sponsors was assembled, and a community selected for an intensive continuing analysis of the political thinking of a sample of the population during the period prior to and immediately following the presidential elections.

The failure of the national polls correctly to predict the election has added significance to the findings from this cooperative research project, some of the preliminary findings of which are presented in this article.

In addition to the three universities—Chicago, Columbia, and Cornell—which participated in this study, the sponsors include the Anti-Defamation League, Columbia Broadcasting System, Elmo Roper, Standard Oil Company of New Jersey, the Elmira *Star Gazette*, and *Time*, Inc. The field work was conducted by International Public Opinion Research, Inc.

The author is a staff member of International Public Opinion Research, Inc.

On November 3, a new national game was born. Everyone was trying to discover What Went Wrong with the Polls. One columnist played the game by wondering how the pollsters would have come out if they had "pressed one thingumajig instead of another." All this contributed to the feeling that polling and predicting elections on the basis of surveys was a kind of magic, and that what went wrong with the polls on November 2 was as unforeseeable as a bolt out of the blue.

The actual situation bears very little, if any, similarity to this picture. What happened on November 2 was merely a demonstration—a very dramatic demonstration—of something most research people have known for a long time; namely, that predicting *behavior* on the basis of knowledge of *attitude* is a very hazardous venture. It is all the more hazardous to the extent that the attitude is complex and the knowledge about it incomplete. And predicting votes *merely* on the basis of expressed vote intention and without reference to the social conditions in which the expression occurs is not only hazardous but is also contrary to social science methodology.

What exactly IS a "sample"?

Copernicus Consulting
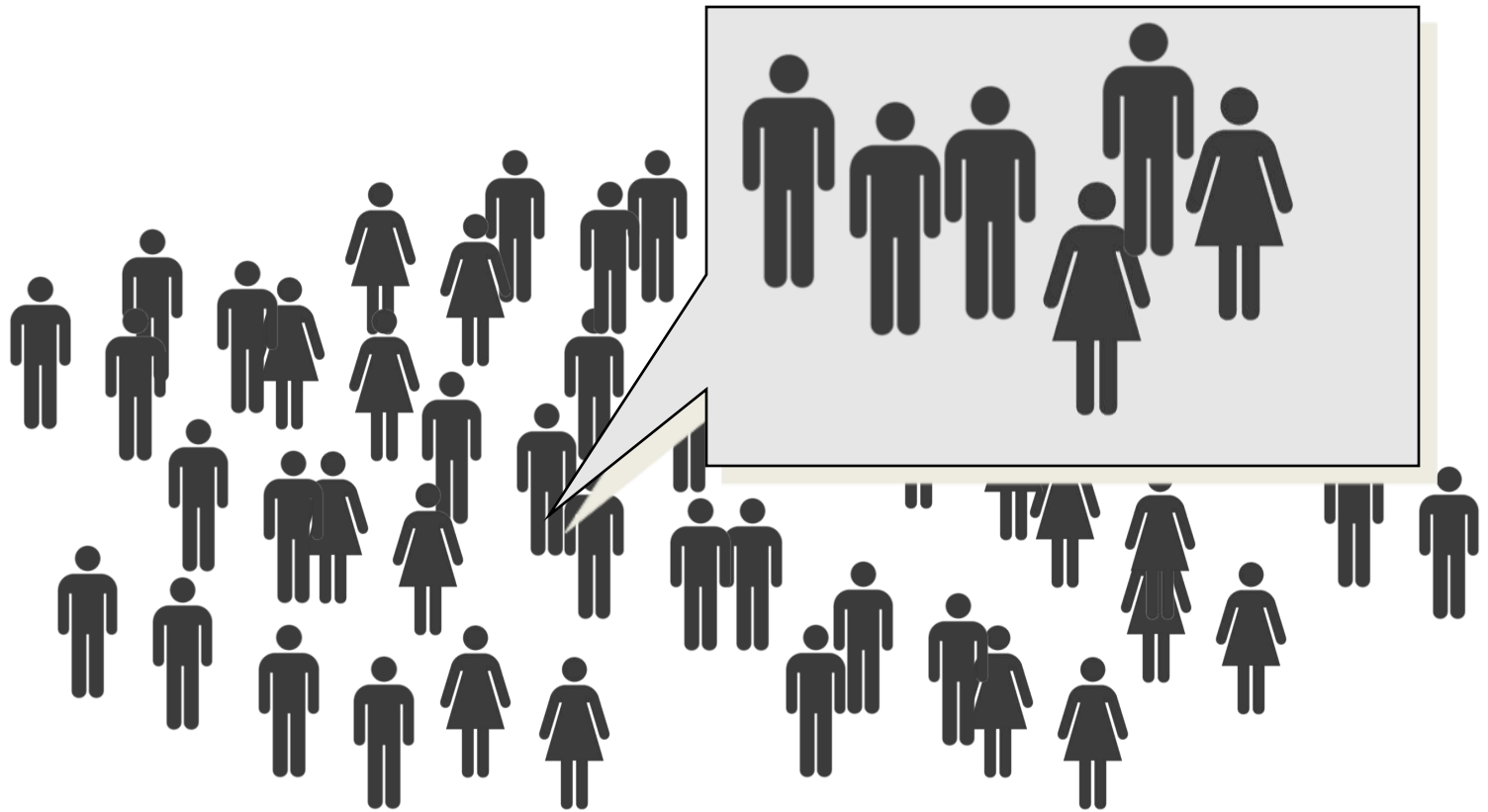
What exactly IS a "sample"?

A subset of the population, selected by either "probability" or "non-probability" methods. If you have a "probability sample" you simply know the likelihood of any member of the population being included (not necessarily that it is "random."
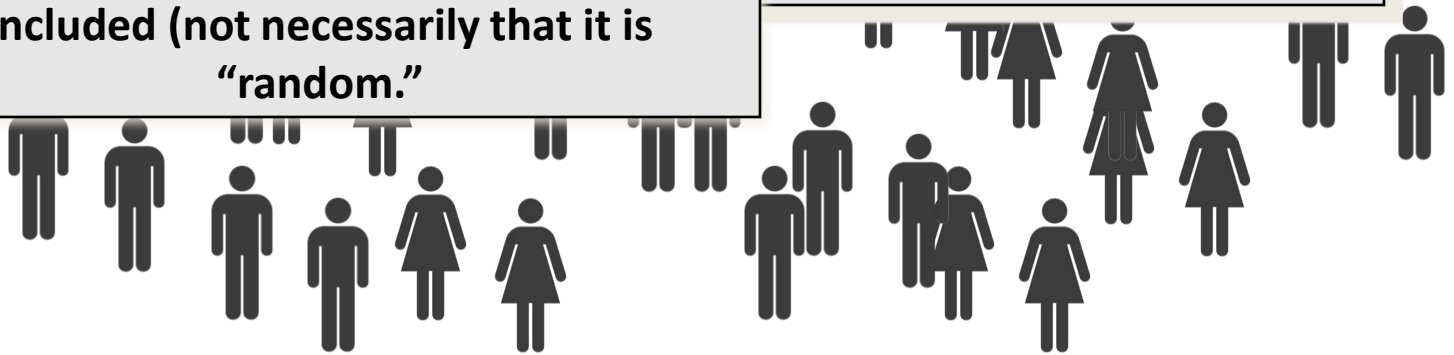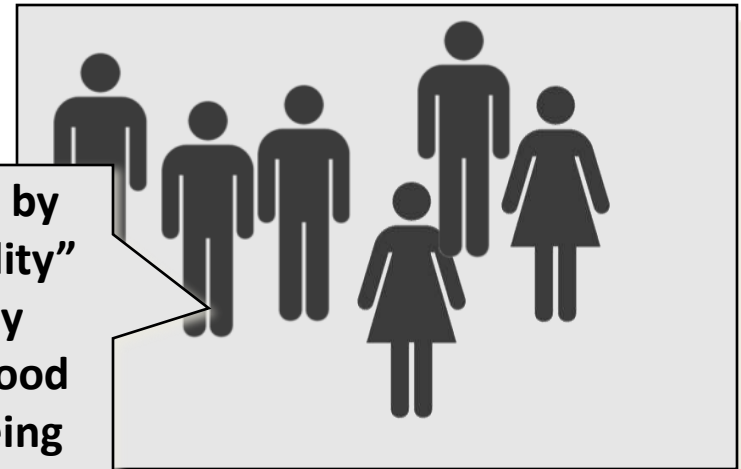
What do quant researchers worry about?

Assumptions of quantitative sampling

We want to generalize to the population.

Random events are predictable.

We can compare random events to our results.

Therefore…

Probability sampling is the best approach.

Copernicus Consulting

What do qual researchers worry about?

Assumptions of qualitative sampling

Social actors are not predictable like objects.

Randomized events are irrelevant to social life.

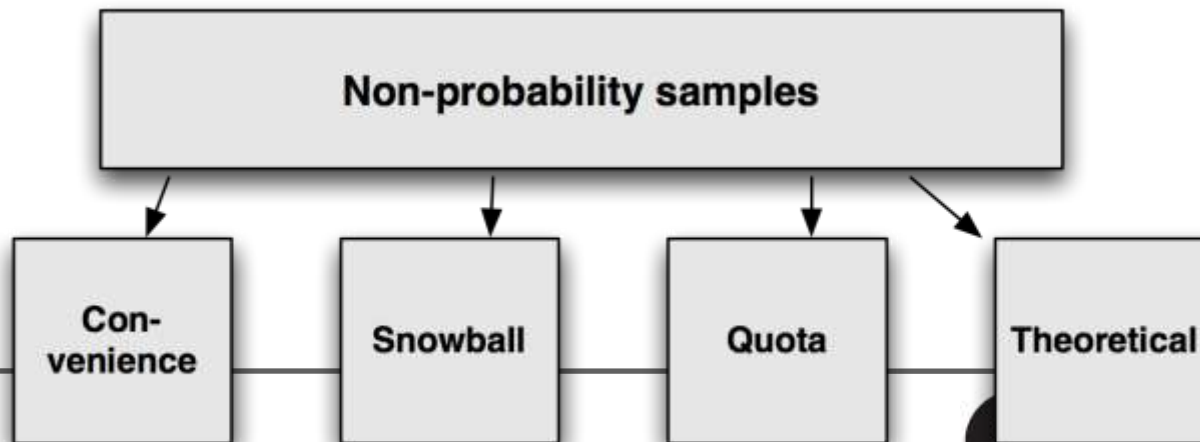Probability sampling is expensive and inefficient.

Therefore…

Non-probability sampling is the best approach.

Copernicus Consulting

Types of samples

Probability samples
- Simple Random
- Systematic Random
- Stratified
- Multi-stage Cluster

Non-probability samples
- Con-venience
- Snowball
- Quota
- Theoretical

Copernicus Consulting
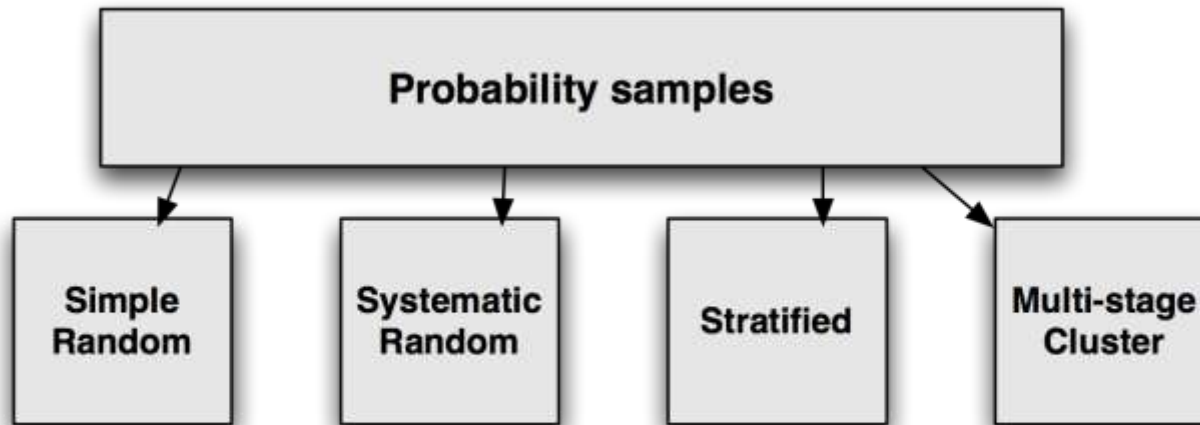
Simple Random Sample

1. Get a list or "sampling frame"

   a. This is the hard part! It must not systematically exclude anyone.

   b. Remember the famous sampling mistake?

2. Generate random numbers

3. Select one person per random number

Systematic Random Sample

1. Select a random number, which will be known as k

2. Get a list of people, or observe a flow of people (e.g., pedestrians on a corner)

3. Select every kth person

   a. Careful that there is no systematic rhythm to the flow or list of people.

   b. If every 4th person on the list is, say, "rich" or "senior" or some other consistent pattern, avoid this method

Copernicus Consulting

Stratified Random Sample

1. Separate your population into groups or "strata"

2. Do either a simple random sample or systematic random sample from there

    a. Note you must know easily what the "strata" are before attempting this

    b. If your sampling frame is sorted by, say, school district, then you're able to use this method

Multi-stage Cluster Sample

1. Get a list of "clusters," e.g., branches of a company
2. Randomly sample clusters from that list
3. Have a list of, say, 10 branches
4. Randomly sample people within those branches
   a. This method is complex and expensive!

Copernicus Consulting

The Convenience Sample

1. Find some people that are easy to find

The Snowball Sample

1. Find a few people that are relevant to your topic.
2. Ask them to refer you to more of them.
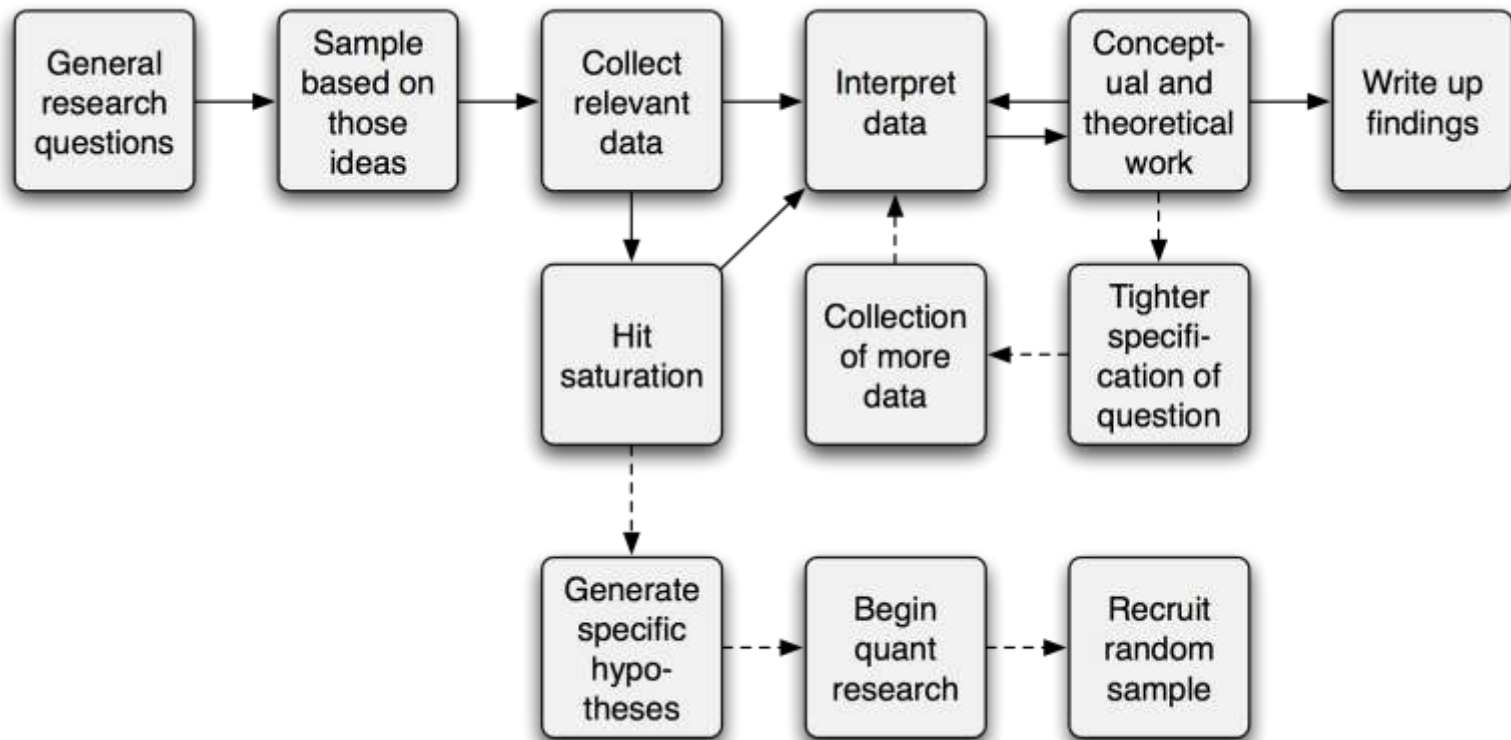
Copernicus Consulting

The Quota Sample

1. Determine what the population looks like in terms of specific qualities.

2. Create "quotas" based on those qualities.

3. Select people for each quota.

The Theoretical Sample

What about generalizing?

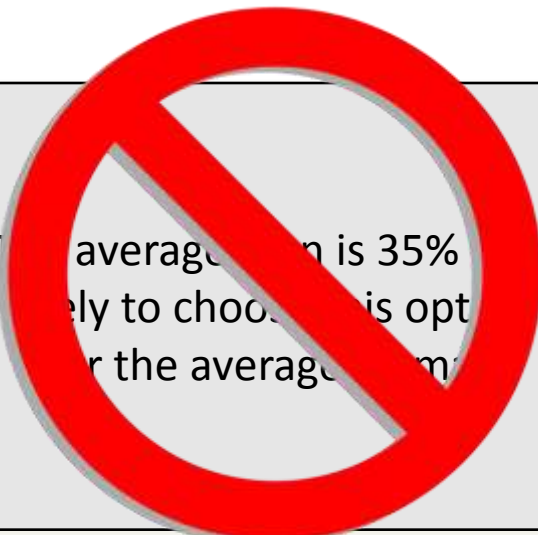"Our findings have a margin of error of + or - 4%, 19 times out of 20."

"The average man is 35% more likely to choose this option over the average woman."

Proviso in non-probability sampling: no generalizing

"Our findings have a margin of error of + or - 4%, 19 times of 20."

"The average man is 35% more likely to choose this option for the average woman."

Copernicus Consulting

Ethnographers sample…

People

Places

Contexts

Times

Events

Copernicus Consulting

Interviewers sample…

People

Places

Times

Content analysts sample…

Media

Dates

How many?

- Qualitative researchers seek "saturation"
  - "How many" isn't the issue. Do you understand the phenomenon? Have you learned enough?
  - Mere numbers are irrelevant. You want "verstehn" or deep understanding
- Quantitative researchers seek statistical validity
  - Can you safely generalize to the population? Have you systematically excluded anyone? (See the "famous sampling mistake"!)

Copernicus Consulting

Improving Response Rates

- Personalize the invitation
- Offer money -- no strings attached!

Copernicus Consulting
Design research and strategy

http://www.copernicusconsulting.net

Copernicus Consulting