

Introduction to UX Research

Lesson 5: Sampling Theory

Sampling Theory

Goal

Get a subset of people that accurately represent the population they are taken from

- Who are you testing?
- Why are you testing them?
- Who is your customer segment?
- What is the expected result? How does it affect the KPI?

Random Sampling

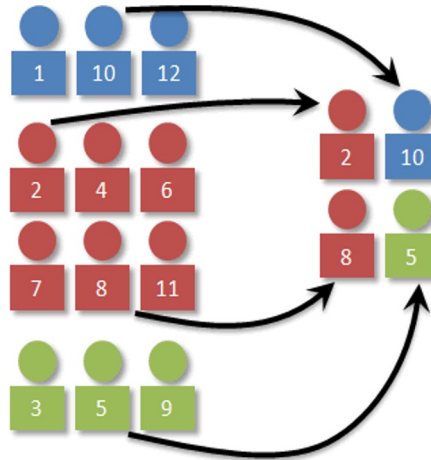
- A process for selecting a sample of study participants from a larger potential group of eligible individuals, such that each person has the same fixed probability of being included in the sample and some chance procedure is used to determine who specifically is chosen. The main value of this form of probability sampling is its positive impact on generalizability and external validity.
- **Example**
Assign a unique ID# to each person that uses your website (easy, I know). Pick people for the study by using a random number generator.

Non- Random Sampling

- Any process of choosing a subset of participants or cases from a larger population in which it is impossible to precisely determine each unit's likelihood of being selected
- Affects generalizability – your sample won't represent the population, but you won't know how different your sample and the population are!
- **Example**
Have a “family and friends” trial period for a product before it is launched to the public.

Stratified (Random) Sampling

- The process of selecting a sample from a population comprised of various subgroups (strata) in such a way that each subgroup is represented
- You need a list of all people in the population with their associated stratum

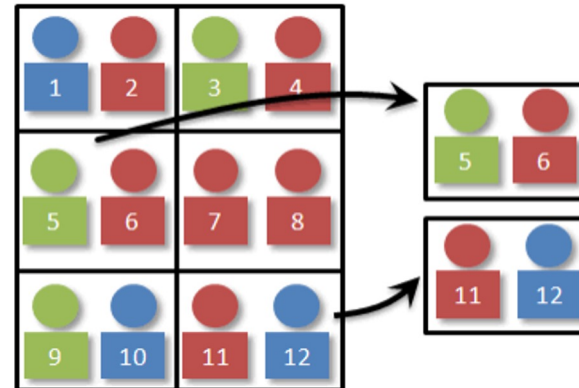


Examples of Strata:

- Gender identity
- Age
- How they found your website
- Purchase history
- Income

Cluster (Random) Sampling

- A tiered method of obtaining units for a study. A population is first subdivided into smaller groups or clusters (often administrative or geographical), and a random sample of these clusters is drawn. The process is then repeated for each sampled cluster until the required level is reached.



Convenience (Non-Random) Sampling

- Collect data from people who happen to be nearby and/or are available (students in your class, the next 1,000 people that visit your website, friends and family)

Volunteer (Non-Random) Sampling

- Advertising your study, paying people for taking your study, providing other incentives (like food) for taking your study

Snowball (Non-Random) Sampling

- Getting a few people from a certain network to take your study (e.g., your place of worship, your company, your Facebook friends).
- These first few people then spread the word to others in the network. Then the new people spread the word in the network, etc., etc.
- The sample size increases as the word spreads throughout the network.

Screening

- Ensuring that the participants meet certain criteria that enables them to give meaningful feedback
- Distractor questions conceal the purpose of the study

For video games:

- *If you had two hours to spend on a rainy afternoon, what would you do?*
 - Read a book
 - Play a video game
 - Cook a meal
 - If 'read' or 'cook', exclude
- *Have you ever played our game?*
 - If 'no', exclude