



RESEARCH METHODS-I

One: How do you feel about your future?

- ☒ very optimistic
- ☐ somewhat optimistic
- ☐ somewhat pessimistic
- ☐ very pessimistic

RESEARCH METHODS AND SAMPLING TECHNIQUES



Sampling

- The process of selecting members of the population to be included in the sample.
- Research uses data obtained from a sample to make inferences about the population.

Population

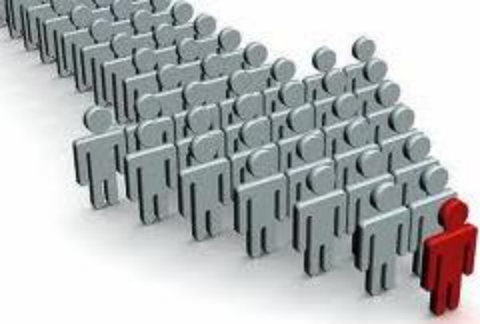
- A defined group of individuals from which a sample is taken (e.g., married individuals, psychology students etc.)
- The sample must reflect the population!!! Otherwise, we face the risk of **sampling bias... (örnekleme yanlılığı)** – not reflecting that sample or population!

Sampling



Ideal: Including the entire population... (nüfus sayımı)

- Determining a sample from the population of interest...
Adolescents, adults, prisoners, teachers...
- Good sampling allows us to make inferences about the **entire population**.
- **Statistical Theory**
Sample → population
Statistical significance (later on)



Sampling Techniques

- **Probability Sampling**
 - Simple Random Sampling – equal chance of selection
 - Stratified Random Sampling
 - Cluster Sampling
- **Nonprobability Sampling**
 - Haphazard sampling - *Ulaşılabilirlik*
 - Purposive Sampling
 - Quota Sampling
 - Snowball Sampling



Probability Sampling

- You can determine the probability of any member of the population being included in the sample.
- The best way to make inferences about a population...

Probability Sampling

Simple Random Sampling

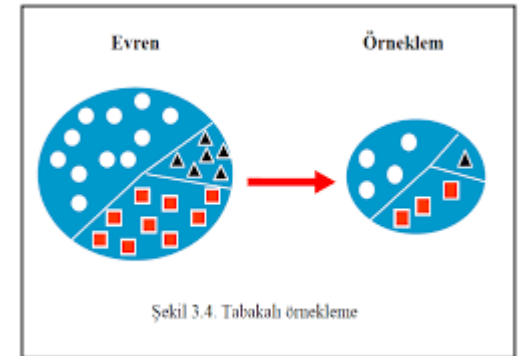
- The probability of sampling all individuals in the population is equal.
- N's are randomly selected using various methods;
e.g., psychology students.
- If you are interested in surveying ÇAĞ UNIVERSITY students, you will need a complete list of all students...

Probability Sampling

Stratified Sampling

Tabakalı Rastgele Örnekleme

- **Dividing the population into subgroups**
e.g., age, gender, education level, political views.
- **Random selection within strata/layers**
e.g., we want to select 9 cubes from a total of 30...
- When categorized by color (blue, green, pink) and taking 3 from each group, we get 9 cubes...

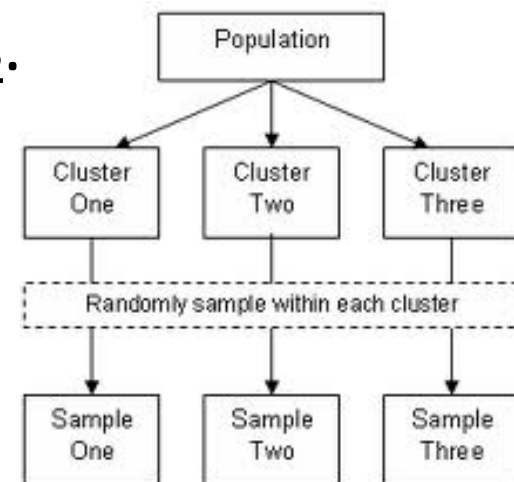


Probability Sampling

Cluster Sampling

Küme Örnekleme

- **Population lists are usually unavailable!!**
- Used when you can't identify individuals.
- Randomly sample clusters of people in identifiable groups.
 - e.g., sample from each ENG102 section.
- Collect data from all people within the sampled clusters.



FARKLARI??

- **Tabakalı Örneklem**: Alt gruplar (tabakalar) homojendir.
- Aynı tabakada yer alan bireyler benzer özelliklere sahip!!
 - Örneğin, yaş, cinsiyet ya da gelir seviyesine göre tabakalar oluşturulabilir.
- **Küme Örneklem**: Kümeler heterojendir.
- Her küme popülasyonun küçük bir temsili olarak kabul edilir.
 - Küme içindeki bireyler çeşitli özellikler taşıyabilir.

Nonprobability Sampling

- A type of sampling procedure in which one cannot specify the probability that any member of the population will be included in the sample
- Accidental or convenience sample
- Cheap and convenient
- Introduces biases – big problem when people select themselves to be part of the survey (return a magazine survey, for example)

Nonprobability Sampling


Haphazard Sampling

- Kolayda Örnekleme (**Convenience Sampling**)
- Select Ss “conveniently” – En kolay yol ile
- Population: ÇAĞ UNIVERSITY. Stand in front of the cafétéria between 12:00 and 13:30 and ask people to participate your research.
- Disadvantages
 - Biases → e.g., **you’d exclude students who eat at dorms...**
 - Difficulty in sample → population (generalisation)

Nonprobability Sampling

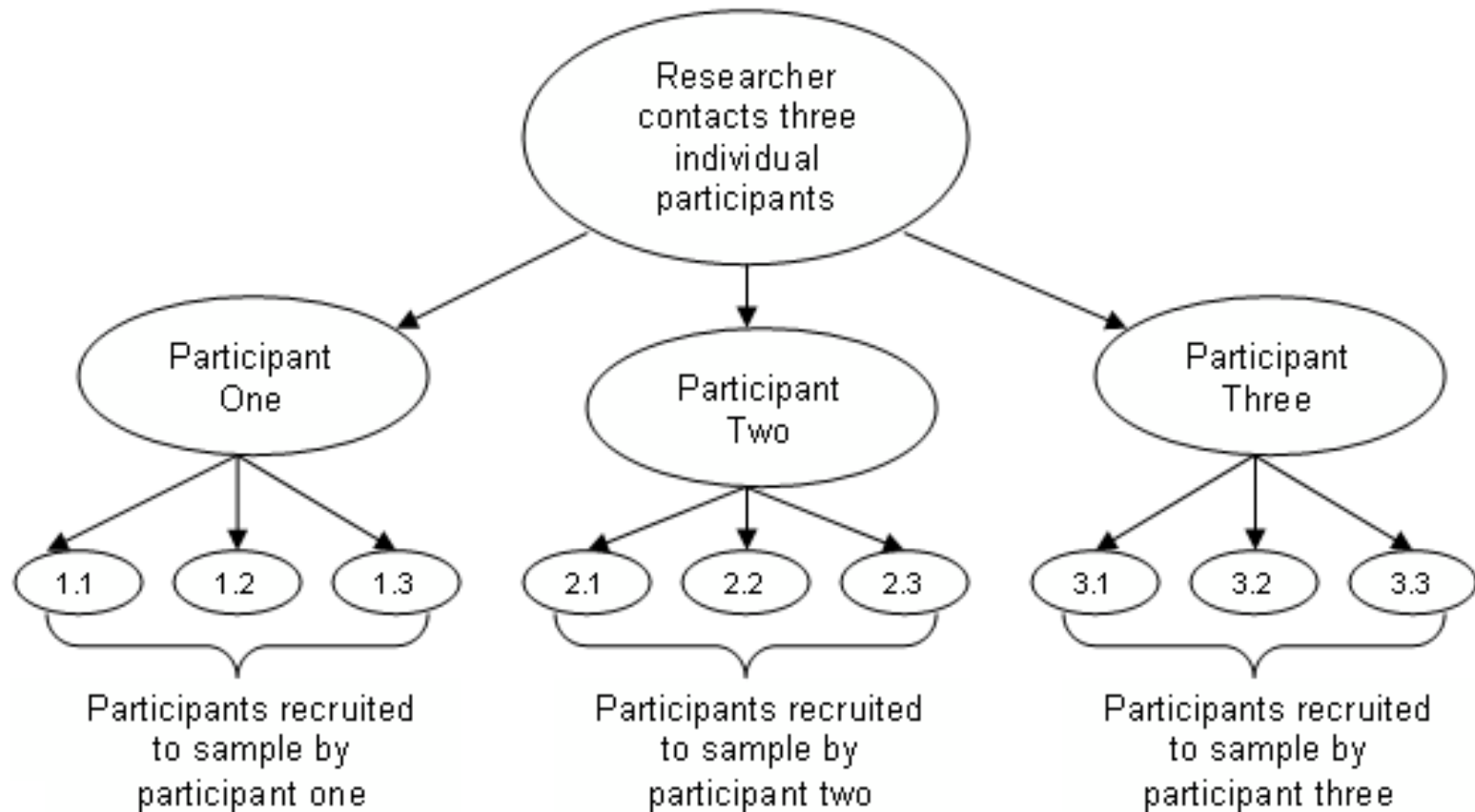
Purposive Sampling

Amaçlı Örnekleme

- Aim → selecting Ss who meet predetermined criteria.
- e.g., population: young theatre goers
 - Not just anyone walking towards the theatre
 - Under, say, 30 years of age.
 - Students (or who look like students)
- A smart practical way of approaching to having a good sample
- But, recall that not a probabilistic sampling process


Nonprobability Sampling

Snowball Sampling



Sampling Frame

- Sampling frame → the actual population of interest.
- Population: residents of Tarsus 😊
- Possible sampling frames can be:
 - *People who go to Kebapçı Eyüp* 😊



Overall, how do you feel
about your future?

- ☒ very optimistic
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- ☐ somewhat pessimistic
- ☐ very pessimistic

Any questions??? 😊