

Respondent driven-sampling

Procedure to sample from hidden or hard-to-reach populations

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May 23, 2021

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Hidden and hard-to-reach populations

- ▶ No sampling frame exists: size and boundaries of the population are unknown.
- ▶ Privacy concerns: stigmatized or illegal behavior.
- ▶ Fear of exposition or prosecution complicates the enumeration and learning about these populations.
- ▶ High logistic cost when the occurrence frequency is low.
- ▶ Examples: Heavy drug users, sex workers, homeless people, and men who have sex with men.

Existing sampling methods

- ▶ Snowball ([Goodman \(1961\)](#))

From starting individuals, each subject provides a list of names of known individuals from the target population. The researcher invites this person to participate, who can agree or deny it.

- ▶ Key informant ([Deaux and Callaghan \(1985\)](#))

Expert respondents are selected to answer about others' behavior. For instance, social workers, drug abuse counselors, official, etc.

- ▶ Targeted ([Watters and Biernacki \(1989\)](#))

Field researchers build an ethnographic mapping of a target population, and recruit a number of individuals at sites identified by this map.

Problems with snowball sampling

- ▶ Inferences about the individuals depend on the initial sample.
- ▶ Bias towards individuals who are more cooperative and agree to participate.
- ▶ Bias because of masking, that is, protecting friends by not referring them.
- ▶ Individuals with more links may be oversampled.

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Markov chain

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