




LITTLE

QUICK FIX:

**SELECT A
SAMPLE**

#LittleQuickFix



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Editor: Alysha Owen
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Cover design: Shaun Mercier
Typeset by: C&M Digitals (P) Ltd, Chennai, India
Printed in the UK

© Paul Silvia 2020

First published 2020

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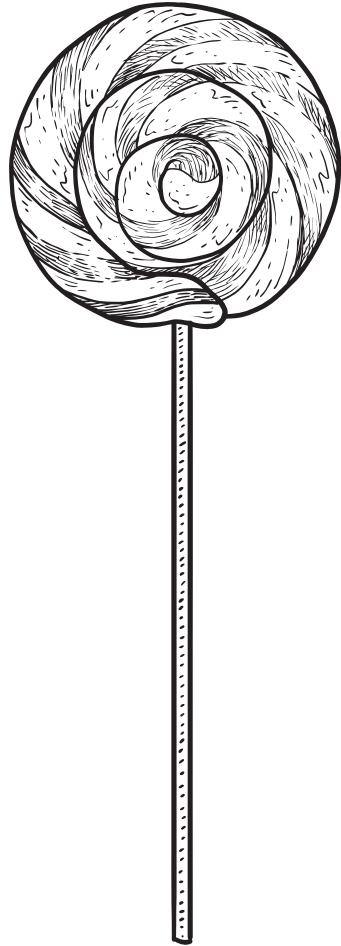
Library of Congress Control Number: 2019949963

British Library Cataloguing in Publication data

A catalogue record for this book is available
from the British Library

ISBN 978-1-5297-0899-8

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Everything in this book!

Section 1 Sampling is studying a ‘part’ to understand the ‘whole’. Studying samples enables researchers to understand large, dispersed groups.

Section 2 Your population is the broader group you want to understand, not ‘everyone everywhere’. Defining your population narrowly gives your project focus and credibility.

Section 3 Probability sampling methods, the gold standard in sampling, should be your first choice. They create a small-scale replica of the population by randomly selecting members from it.

Section 4 Because non-probability methods – quota, convenience, and purposive sampling – introduce subjective judgment into the sampling process, you should view them as fallbacks for when probability sampling isn’t feasible.



Section 5 Asking participants for referrals, known as **snowball sampling**, lets you recruit members of ill-defined, hard-to-reach, and wary populations.

Section 6 To sample ethically, researchers must **think through the legal and ethical issues** and consult their local ethics office.

Section 7 Reducing error involves targeting both **random error and systematic, consistent biases in sampling**.

Section 8 Plan for the largest feasible sample size: **large samples reduce your margin of error and increase statistical power**.



Section

**Studying samples
enables researchers
to understand large,
dispersed groups**



What is sampling?

A



summary



**Sampling is selecting and
studying 'some' to draw
conclusions about 'all'.**



Who do you want to study?

Instead of studying a whole population, researchers study a sample – a smaller group – because most populations are too large, far-flung, and hard to reach. Sampling a subset of the population is an efficient alternative that balances research quality (the validity and credibility of your conclusions) with feasibility.

Researchers can sample anything – objects, institutions, and countries, to name a few – but sampling people raises unique practical and legal issues. Because people are so diverse, no human population is easily captured by a handful of people. And because we can't force people to participate in research, ethical and legal obligations constrain our sampling plans. The craft of real-world sampling involves balancing research quality, resources, and ethics.

PARTS AND WHOLE

Sampling is selecting 'some' to make inferences about 'all', selecting parts to draw conclusions about the whole. You create a sample by selecting elements from a population.

- Your **population** is the 'all' that you want to understand. In a study of voter apathy, for example, the population might be all eligible voters in New Zealand.
- Your **elements** – also known as **units** or **members** – are the parts you select from the whole. In our example, the population (eligible voters in New Zealand) has around 3,700,000 elements (individual people).
- Your **sample** is the resulting group of elements. A group of 2,000 eligible voters who completed the survey, for example, would be our sample of the population of Kiwi voters.

WHY DO RESEARCHERS SELECT SAMPLES?

Researchers study samples because of ever-pesky reality. Most human populations that interest social scientists are large, dispersed, and not easily reached. Surveying the population of 3,700,000 New Zealand voters, for example, would be extraordinarily expensive.

By sampling part of the population, researchers balance research **quality** and **feasibility**. Quality projects make claims that are *valid* (likely to be true) and *credible* (likely to persuade the project's audience). Feasible projects have the necessary resources – money, personnel, and time – to execute the project.

YOU CAN SAMPLE ANYTHING

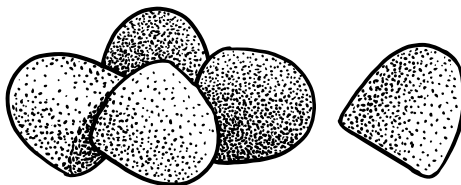
Researchers in the social and behavioral sciences commonly sample people to learn about human populations, but **the logic of sampling applies to all kinds of populations**. Your work might involve sampling elements like artifacts, institutions, epochs, or environments.

Sampling is important for non-scholarly purposes too. A quality-control manager in a shampoo factory will test only a few bottles to appraise the day's output; an apple farmer will sample only a handful of apples to evaluate the ripeness of the orchard. As in scholarly sampling, these sampling decisions reflect realistic constraints – you can't bite into every apple and still have a crop.

SAMPLING PEOPLE IS PECULIARLY VEXING

Although the theory doesn't change, sampling people is uniquely complicated. First, **people are diverse**. Unlike apples and shampoo bottles, humans are incredibly varied. Because we almost always expect a population of people to be diverse and complex, no population is credibly represented by a handful of people.

Second, **ethical and legal obligations constrain sampling**. Our apple farmer can yank any apple she wants from her trees, but researchers can't force people to take part in research. Identifying and contacting people for research can potentially put them at risk.





SETTING THE STAGE FOR SAMPLING

Let's do some early brainstorming about your project – we'll refine these rough ideas later.

Ask yourself:



1 How diverse is the population you expect to study?

Think about common demographic factors – age, gender, employment, relationship status, and social class, to name a few. How varied are your population members?

2 What ethical and legal issues stand out?

Do you expect to contact anyone who might be unable to give consent?

- Some people can't legally consent, such as children or people under guardianship.
- Other people might not understand what you're asking, such as those who have limited comprehension of your language.

Do you have a plan for data privacy and security?

- Do you really need to collect identifying data, like names, contact information, and likenesses?
- If you do, how will you keep the research records and data secure and private? Where will you keep digital and paper records? Who else will have access?

3 What resources are available?

How much money might the project cost?

- Think about everything from copies, travel, incentives, and research help.

Who can help?

- Will anyone, from supervisors to fellow students, help you collect or analyse the data? What will help cost you in money or favours owed?

How much time do you have to finish the project?

- Do you have a 'hard deadline' driven by a degree requirement? Working backward, how many months do you have?