

4.15: Summary

In this chapter I've covered two main topics. The first half of the chapter talks about sampling theory, and the second half talks about how we can use sampling theory to construct estimates of the population parameters. The section breakdown looks like this:

- Basic ideas about samples, sampling and populations
- Statistical theory of sampling: the law of large numbers, sampling distributions and the central limit theorem.
- Estimating means and standard deviations
- confidence intervals

As always, there's a lot of topics related to sampling and estimation that aren't covered in this chapter, but for an introductory psychology class this is fairly comprehensive I think. For most applied researchers you won't need much more theory than this. One big question that I haven't touched on in this chapter is what you do when you don't have a simple random sample. There is a lot of statistical theory you can draw on to handle this situation, but it's well beyond the scope of this book.

This page titled [4.15: Summary](#) is shared under a [CC BY-SA 4.0](#) license and was authored, remixed, and/or curated by [Matthew J. C. Crump](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.