

2 Bootstrap confidence intervals

0%

To "pull yourself up by your bootstraps" is a classic idiom meaning that you achieve a difficult task by yourself with no help at all. In statistical inference, you want to know what would happen if you could repeat your data acquisition an infinite number of times. This task is impossible, but can we use only the data we actually have to get close to the same result as an infinitude of experiments? The answer is yes! The technique to do it is aptly called bootstrapping. This chapter will introduce you to this extraordinarily powerful tool.

Generating bootstrap replicates	50 XP
Getting the terminology down	50 XP
Bootstrapping by hand	50 XP
Visualizing bootstrap samples	100 XP
Bootstrap confidence intervals	50 XP
Generating many bootstrap replicates	100 XP
Bootstrap replicates of the mean and the SEM	100 XP
Confidence intervals of rainfall data	50 XP
Bootstrap replicates of other statistics	100 XP
Confidence interval on the rate of no-hitters	100 XP
Pairs bootstrap	50 XP
A function to do pairs bootstrap	100 XP
Pairs bootstrap of literacy/fertility data	100 XP
Plotting bootstrap regressions	100 XP

[Hide Details](#)