

Concept Check #4

HST 190: Introduction to Biostatistics

This worksheet is open-note. Take 15 minutes to consider the following questions. We will discuss as a group.

1. In 2010, the General Social Survey collected responses from 1,154 US residents. The survey is conducted face-to-face with an in-person interview of a randomly selected sample of adults. A 95% confidence interval from the 2010 GSS survey for the collected answers of average leisure time after a work day is 3.53 to 3.83 hours. *True or False, and Explain:* We can be 95% confident that the interval (3.53, 3.83) hours contains the mean hours that the sampled adults have for leisure time after an average workday.
2. *True or False, and Explain:* Considering the same (3.53, 3.83) 95% CI, there is a 5% chance that the interval (3.53, 3.83) hours does not contain the mean hours that U.S. adults have for leisure time after an average workday.
3. *True or False, and Explain:* If we formed a 99% confidence interval using the same data, it would be wider than the 95% confidence interval.