Chapter 9 exercises: Coder edition

Use the data from this chapter and the appropriate tests to examine number of opioid prescriptions and distance to syringe program.

1. Import the cleaned data set **dist\_ssp\_amfar\_ch9.csv** from **edge.sagepub.com/harris1e**.
2. Create a model with number of opioid prescriptions per 100 people as the predictor variable and the distance to syringe program variable transformed using a cube root transformation as the outcome variable.
3. Check the model assumptions.
4. Interpret the model results.
5. Add the metro variable to the model.
6. Interpret the model results.
7. Compare the larger and smaller models using the Partial-*F* test.
8. Interpret and report the results of the Partial-*F* test.

Chapter 9 exercises: Hacker edition

Complete #1 of the coder edition, then complete the following:

1. Check the distribution of the opioid prescription variable.
2. Try at least three transformations to transfer the opioid prescription variable to a more normally distributed variable; choose the transformation that works the best to normalize the variable.
3. Create a model with percent uninsured as the predictor variable and the distance to syringe program variable transformed using a cube root transformation as the outcome variable.
4. Check the model assumptions.
5. Interpret the model results.
6. Add the transformed opioid prescription variable and the metro variable to the model.
7. Interpret the model results.
8. Compare the larger and smaller models using the Partial-*F* test.
9. Interpret and report the results of the Partial-*F* test.