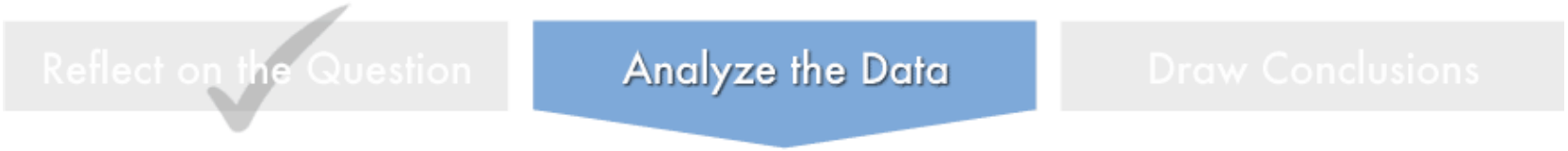

Primary Research Question

How long do animals stay in the shelter before they are adopted?

Conduct the Analysis in R

1. Type or copy the script from the the Prepare for the Analysis section into the Script window of R.
2. Select the portion of the code you wish to run, then press "ctrl+ enter."
3. Output can be found in the Console window.

(1/1 point)

How would you describe the shape of the distribution of *daystoadopt*?

- symmetrical
- bimodal
- positively skewed ✔
- negatively skewed

Help

Correct. Several animals spent very little time in the shelter prior to adoption, and as daystoadopt grew, the number of animals in each bar becomes less and less. Thus, the histogram peaks to the left with a relatively long tail to the right; this is a positively-skewed distribution.

Final Check | Save | Hide Answer *You have used 1 of 2 submissions*

(1/1 point)

Which measures of center and spread should you report for this data?

- median and IQR ✔
- mean and standard deviation

Correct. The median and IQR are the appropriate measures of center and spread for a highly skewed distribution, as they are not as distorted by the skew as mean and standard deviation.

Check Hide Answer

(2/2 points)

Enter numerical values for the following:

Help

Center=

13

13

Spread=

30

30

Show Answer *You have used 2 of 2 submissions*

(2/2 points)

It looks like one adopted animal spent much more time in the shelter than the others.

How many days was this animal in the shelter?

211

211

Answer: 211

Help

What was the z-score for this particular animal? Round to the nearest ONE decimal places.

5.1

5.1

Answer: 5.1

Final Check | Save | Hide Answer | *You have used 1 of 2 submissions*

(1/1 point)

Why should we NOT report a z-score for this animal, even though we can calculate one?

- A z-score should only be used for distributions of height and weight.
- This animal is an outlier.
- The distribution is skewed. ✔
- The variable is categorical, not quantitative.

Correct. z-scores are calculated based upon mean and standard deviation, which are highly influenced by skewness and therefore misleading. As a result, the z-score is also misleading.

Help

Hide Answer

You have used 2 of 2 submissions

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