ISS 305:002
Evaluating Evidence:
Becoming a Smart Research Consumer

6. Problems of description

Reminder: Turn on your I<CLICKER

ISS 305: Mini-quiz Question 1

• What is the Mode?

1, 9, 9, 10, 15, 15, 15, 20, 31

A) 9
B) 12.5
C) 15
D) 9 and 15
E) None of the above.

ISS 305: Mini-quiz Question 2

• What is the Mode?
  42, 42, 42,
  50, 50,
  55, 55, 55,
  58,
  59

A) 42
B) 50
C) 55
D) 42 and 55
E) None of the above.

PSY 395: Mini-Quiz Question

• What is the Mode?
  7, 12, 15, 16, 17, 21, 22, 23, 25

A) 16
B) 16.5
C) 17
D) 21
E) None of the above.

ISS 305: Mini-quiz Question

- What is the Median?

1, 5, 2, 8, 7, 2

A) 2.5
B) 3.5
C) 5
D) 8
E) None of the above.

Properties of the mean

Means...
- Can (falsely) give an illusion of great precision
  - **For example, if there were only three scores, -1, 0, and -3, the mean would be -1.333333333333333**
  - **but the mean isn't more precise than the scores that go into computing it (here, simply to whole numbers)**

ISS 305: Mini-quiz Question

Which of the following is <u>not true</u> about the arithmetic mean as a measure of central tendency?

A. it takes every observation into account
B. it can be easily computed
C. it can produce a summary that is far more precise than the observations that it is based on
D. it is very sensitive to extreme scores

ISS 305: Mini-quiz Question

Unlike the mean, the median is

A. sensitive to every available score
B. less sensitive to extreme cases
C. more sensitive to extreme cases
D. none of the above; the median acts just like the mean all the time

ISS 305: Mini-quiz Question

While both tell us how far apart the data values are, standard deviation is preferred over variance because standard deviation returns to the original units of measurement.

A. True

B. False

ISS 305: Mini-quiz Question

The Google chef is a big outlier in the data for average chef salary in Mountain View, CA. A good "average" to use would be

A. The mean

B. The median

C. The range of scores