

3.3.2: Measures of Central Tendency- Mode

The **mode** is the most frequently occurring number in your measurement. That is it. How do you find it? You have to count the number of times each number appears in your measure, then whichever one occurs the most, is the mode.

Table 3.3.2.1- Mode of One

Scores
1
1
1
2
3
4
5

The mode of the above set is 1, which occurs three times. Every other number only occurs once.

OK fine. What happens here:

Table 3.3.2.2- Bi-Modal

Scores
1
1
1
2
2
2
3
4
5
6

Hmm, now 1 and 2 both occur three times each. What do we do?

✓ Example 3.3.2.1

What do we do when there is more than one mode?

Solution

When there are only a couple modes, then we list them. When there are many modes, we don't have to list out each mode.

For Table 3.3.2.2 the mode would be both scores of 1 and scores of 2. This is called bi-modal. When we have more than two modes, it is called multi-modal, and we don't have to list out each mode. Only list what is useful to know.

Why is the mode a measure of central tendency? Well, when we ask, “what are my numbers like”, we can say, “most of the numbers are like a 1 (or whatever the mode is)”.

Is the mode a good measure of central tendency? That depends on your numbers. For example, consider these numbers

Table 3.3.2.1- Mode of One Again

Scores
1
1
2
3
4
5
6
7
8
9

Here, the mode is 1 again, because there are two 1s, and all of the other numbers occur once. But, are most of the numbers like a 1? No, they are mostly not 1s.

“Argh, so should I or should I not use the mode? I thought this class was supposed to tell me what to do?”. There is no telling you what to do. Every time you use a tool in statistics you have to think about what you are doing and justify why what you are doing makes sense. Sorry. (Not sorry).

Note

When might the mode be useful?

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