Simmons OneView

Quick Reference Guide: Mean and Median

Part I: What are Means & Medians? What should you use?

1. Mean: A mean is the average, or sum of answers divided by the total number of answers.

For example, if the entirety of a respondent answer set is as follows:*
- Respondent A: 5
- Respondent B: 10
- Respondent C: 6

The Mean, or average is equal to (5 + 6 + 10)/3 = 7

Please note that the majority of answers are expressed in numerical ranges. Respondents are assigned the midpoint of the numerical range they selected; the calculations are then based on those midpoints.

2. Median: In order to find the median, the full range of answers is arranged in an ordered list. The number at the center of that list is the median.

For example, if the entirety of the ranked respondent answer set (from the previous example) is as follows:*

- Respondent A: 5
- Respondent C: 6
- Respondent B: 10

The Median is 6.

Please note that the majority of answers are expressed in numerical ranges. Respondents are assigned the midpoint of the numerical range they selected; the calculations are then based on those midpoints.

3. Mean vs. Median: The difference between the mean and the median is that the former is affected by outliers.

For example, when looking at income level, you may have an outlier(s) within your target that can pull the average one way or the other, even though these responses may account for a very small part of a long list. For example:

•Respondent V: $45,000
•Respondent W: $50,000
•Respondent X: $60,000
•Respondent Y: $65,000
•Respondent Z: $500,000

The Mean is $144,000. The Median is $65,000.

In the example above, the median provides a more realistic picture of the earning power of an average respondent in your target, while the mean skews significantly higher. In many cases, the mean and median will be similar values, but looking at both can provide a more balanced picture if outliers skew the mean.

Part II: Variable Creation

1. How do I create an average (mean) variable?

a) In the Answer window, select the complete range measured (but not the overlapping variables grouped for your convenience) that you wish to average

b) Right click the mouse and select Functions in the pop-up menu

c) Select Mean

   i. If midpoints are set to 0:

- Click on the volume tab
- Double-click the text boxes for each midpoint and enter in the corresponding numerical midpoint
- Switch back to the average tab

d) Give the mean a title

e) Use the Move to buttons to place the average in the desired location

2. How do I create a median variable?

Follow the steps above, but select Median instead of Mean (Step 3)

Validate Study Results						✕

Title: Median Individual Employment Income

Average	Count	Volume	N-Tile

Description	Keyword	Midpoint	Weight	Total
INDIVIDUAL EMPLOYMENT	EI<5	2.5	9,385,188	23,462,970
INDIVIDUAL EMPLOYMENT	EI57.5	6.25	4,843,864	30,274,150
INDIVIDUAL EMPLOYMENT	EI7.59	8.75	3,325,641	29,099,358
INDIVIDUAL EMPLOYMENT	EI1012.5	11.25	5,781,901	65,046,386
INDIVIDUAL EMPLOYMENT	EI12.514	13.75	5,559,381	76,441,488
INDIVIDUAL EMPLOYMENT	EI1519	17.5	8,942,951	156,501,642
INDIVIDUAL EMPLOYMENT	EI2024	22.5	11,328,359	254,888,077
INDIVIDUAL EMPLOYMENT	EI2529	27.5	11,163,712	307,002,080
INDIVIDUAL EMPLOYMENT	EI3034	32.5	10,302,911	334,844,607
INDIVIDUAL EMPLOYMENT	EI3539	37.5	8,729,406	327,352,725
INDIVIDUAL EMPLOYMENT	EI4044	42.5	8,026,325	341,118,812
INDIVIDUAL EMPLOYMENT	EI4549	47.5	6,543,838	310,832,305

○ Mean
◉ Median
  ☑ Exclude Zeros
  ◉ Continuous ○ Discrete

Move to Coding Box
Append to Coding Box
Move to Columns
Move to Rows
Save to Definitions

Close

Part II: Variable Creation

1. How do I read the average (mean) or median output?

Averages (means) and medians appear in the (000) weighted row of your output. For some variables, like individual employment income, this number will appear in thousands. Other variables, like age, are not in thousands.

Disregard Vertical %, Horizontal %, Index %, and Total %, as these fields are not valid for reading calculated data such as means and medians.

¹ Label changed by user

- The Mean Individual Income of Adults 18+ Who Graduated College or More is $61,600

- The Median Household Income of Adults 18+ Who Graduated College or More is $50,800