How to Add a Vertical Line to Charts in Excel

Authored by

stats writer

November 29, 2025

RECOMMENDED CITATION

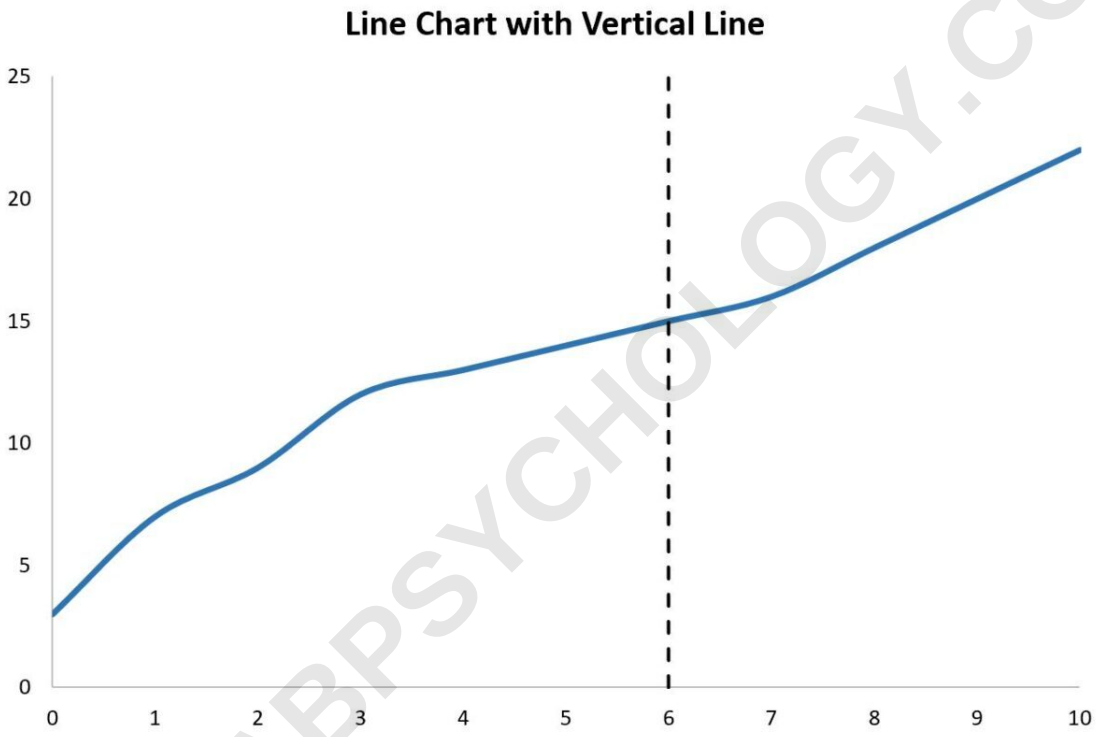
stats writer (2025). *How to Add a Vertical Line to Charts in Excel*. PSYCHOLOGICAL SCALES. Retrieved from https://scales.arabpsychology.com/?p=101317

ARABPSYCHOLOGY.COM

Adding a vertical line to an Excel chart is a simple task that can be done by adding a new data series and using the secondary axis option. To do so, you will need to first create a data series with a value of 0 for each point, then add the data series to the chart, go to Format Data Series, and check the Secondary Axis box. This will display the data series as a vertical line on the chart.

Occasionally you may want to add a vertical line to a chart in Excel at a specific position.

This tutorial provides a step-by-step example of how to add a vertical line to the following line chart in Excel:



ARABPSYCHOLOGY.COM

Let's jump in!

Step 1: Enter the Data

Suppose we would like to create a line chart using the following dataset in Excel:

	A	B	C	D	E
1	**x**	**y**			
2	0	3			
3	1	7			
4	2	9			
5	3	12			
6	4	13			
7	5	14			
8	6	15			
9	7	16			
10	8	18			
11	9	20			
12	10	22			
13					
14					
15					
16					
17					
18					
19					
20					

Step 2: Add Data for Vertical Line

Now suppose we would like to add a vertical line located at x = 6 on the plot.

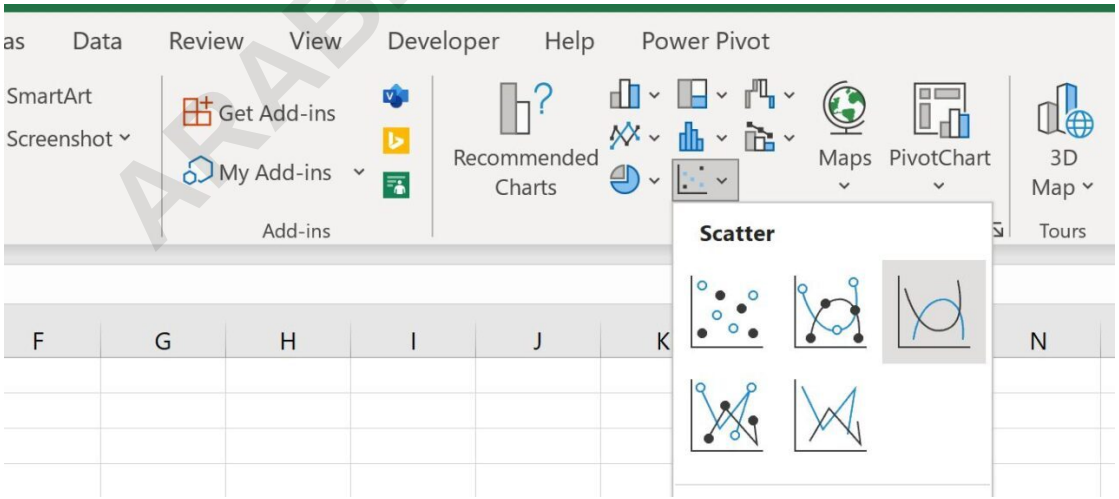
We can add in the following artificial (x, y) coordinates to the dataset:

ARABPSYCHOLOGY.COM

	A	B	C	D	E	F
1	**x**	**y**	**y_vertical**			
2	0	3				
3	1	7				
4	2	9				
5	3	12				
6	4	13				
7	5	14				
8	6	15				
9	7	16				
10	8	18				
11	9	20				
12	10	22				
13	6		0			
14	6		25			
15						
16						
17						
18						
19						
20						

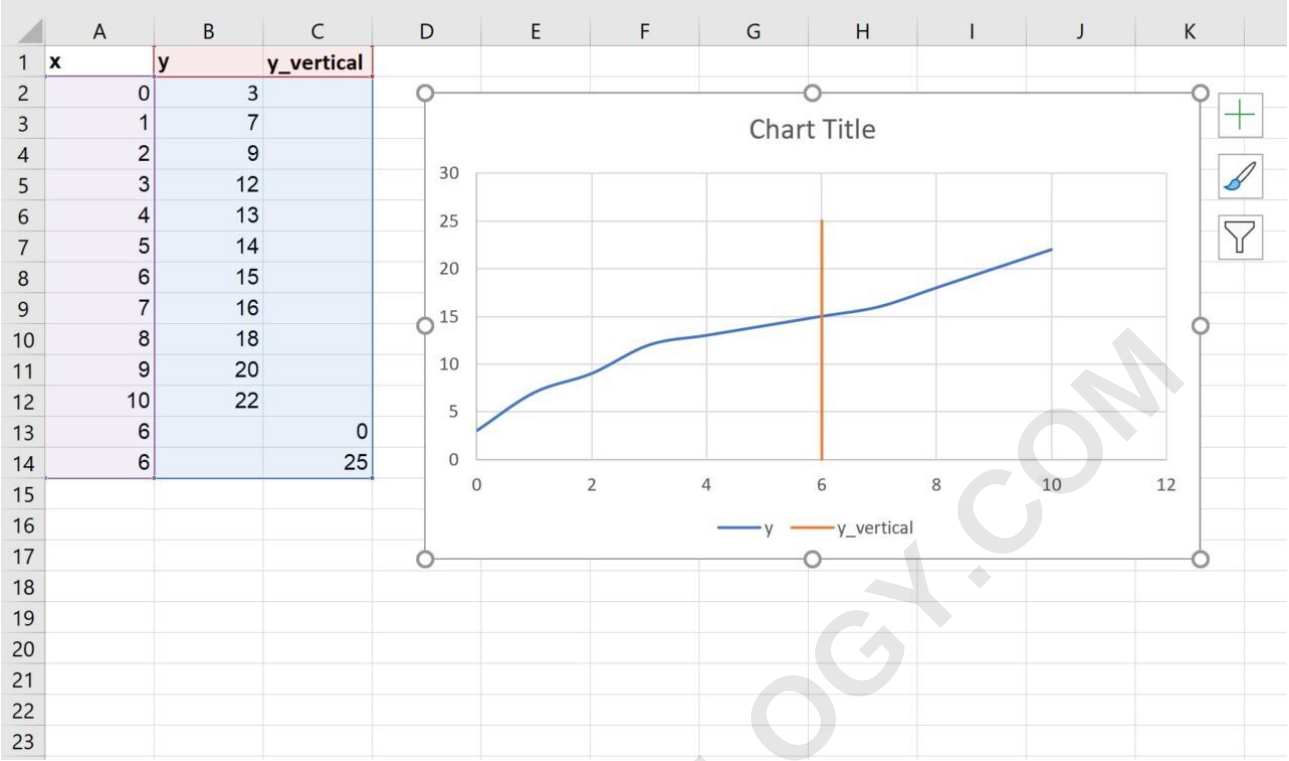
Step 3: Create Line Chart with Vertical Line

Lastly, we can highlight the cells in the range **A2:C14**, then click the **Insert** tab along the top ribbon, then click **Scatter with Smooth Lines** within the **Charts** group:



The following line chart will be created:

ARABPSYCHOLOGY.COM



x	y	y_vertical
0	3	
1	7	
2	9	
3	12	
4	13	
5	14	
6	15	
7	16	
8	18	
9	20	
10	22	
6		0
6		25

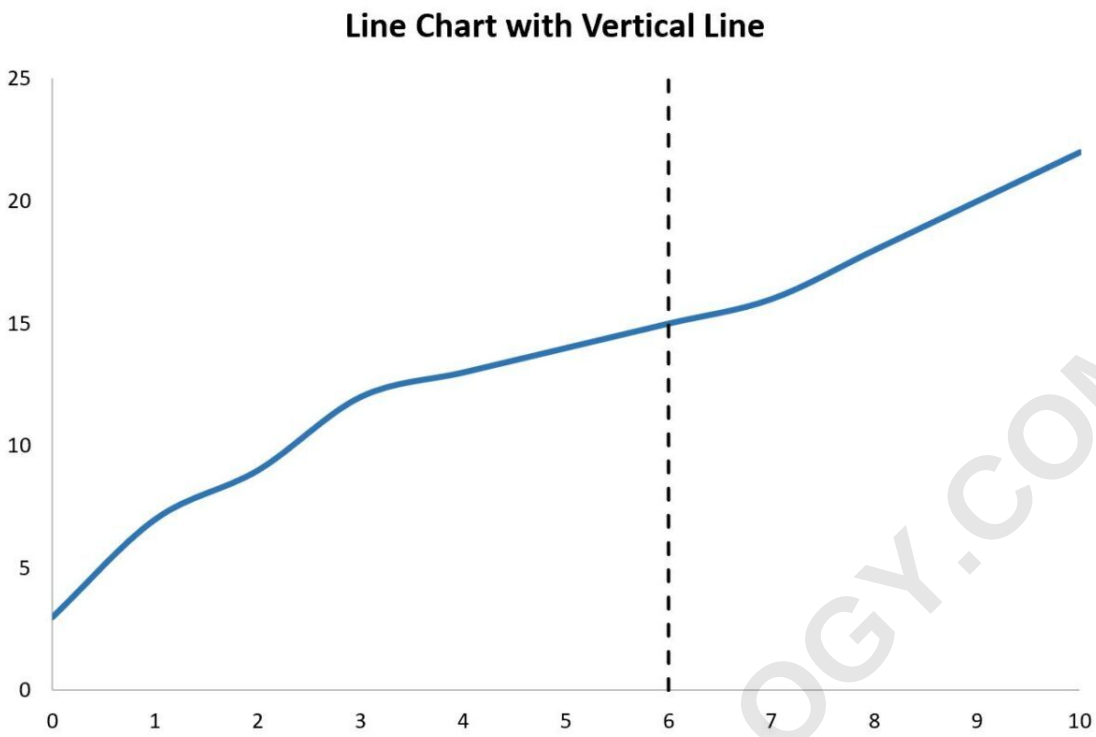
Notice that the vertical line is located at **x = 6**, which we specified at the end of our original dataset.

To change the height of the line, simply change the y-values to use whatever starting and ending points you'd like.

Step 4: Customize the Chart (Optional)

Lastly, feel free to modify the range of each axis along with the style of the vertical line to make it more aesthetically pleasing:

ARABPSYCHOLOGY.COM



ARABPSYCHOLOGY.COM