Making a Publication Quality Bar Graph in Excel

Graph contents: The average number of hours of sleep students in a General Psychology class get for the sections 8:00 am, 10:00 am and 1:00 PM.

1. Enter the data in a table

<table>
<thead>
<tr>
<th>Class</th>
<th>8:00 am</th>
<th>10:00 am</th>
<th>1:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of sleep</td>
<td>6.5</td>
<td>7.6</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Making the basic graph
2. Highlight all 8 sections of the table and do one of the following:
   (a) click on the chart wizard icon (the blue, yellow, red bar graph icon)
   (b) Select INSERT from the menu bar, and pick the option “chart”. This brings you to step 1 of 4.

3. At step 1 of 4: Select the column graph option. Click <next>. This brings you to step 2 of 4.
4. At step 2 of 4: Click <next>. This brings you to step 3 of 4.
5. At step 3 of 4: Make the following two changes
   • Under the “Titles” tab (which is the default), enter the category (X) axis and value (Y) axis. If there is a title there, remove it.
   • Under the “Gridlines” tab, unclick the value (Y) axis: major gridlines.
   • Click <next>. This brings you to step 4 of 4.
6. At step 4 of 4: click <finish>.

Cleaning up the graph
7. Bring the pointer to the white background until it says you are in the Chart Area.
   • Right click on the Chart Area. Select format Chart Area
   • You have two options: Border and Area. Select the option <none> for both.
   • Click on OK to go back to the graph.
8. Bring the pointer to the gray area called the Plot Area.
   • Right click on the plot area. Select format Plot Area.
   • You have two options: Border and Area. Select the option <none> for both.
   • Click on OK to go back to the graph.
9. Bring the pointer over one of the three bars
   • Right click. Select format Data Series.
   • Change the weight to the third choice.
   • Click on OK to go back to the graph.
10. Bring the pointer over the x-axis.
    • Right click. Select format axis.
    • Under the pattern tab, change the weight to the third choice.
    • Under the font tab, change the font to 12.
    • Click on OK to go back to the graph.
11. Bring the pointer over the y-axis.
• Right click. Select format axis.
• Under the pattern tab, change the weight to the third choice.
• Under the font tab, change the font to 12.
• Under the scale tab, change the scale so that it communicates the main point of the graph.
• Click on OK to go back to the graph.

12. Bring the pointer over the category X-axis (the name of the x-axis)
• Right click. Select format axis title.
• Under the font tab, change the font to 14.
• Click on OK to go back to the graph.

13. Bring the pointer over the value Y-axis (the name of the y-axis)
• Right click. Select format axis title.
• Under the font tab, change the font to 14.
• Click on OK to go back to the graph.

14. Depending on the nature of the graph, you may have to make other adjustments.
Making a Publication Quality Scatterplot in Excel

This is a scatterplot of height and weight for n=20 participant. Each row is a participant with a height and weight (I only show some of the data).

1. Enter the data in a table

<table>
<thead>
<tr>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

Making the basic graph

2. Highlight all 40 cells (2 columns x 20 rows), DO NOT include the title height and weight sections of the table and do one of the following:
   (c) click on the chart wizard icon (the blue, yellow, red bar graph icon)
   (d) Select INSERT from the menu bar, and pick the option “chart”. This brings you to step 1 of 4.

3. At step 1 of 4: Select the (XY) scatter graph option. Click <next>. This brings you to step 2 of 4.

4. At step 2 of 4: Click <next>. This brings you to step 3 of 4.

5. At step 3 of 4: Make the following two changes
   • Under the “Titles” tab (which is the default), enter the category (X) axis and value (Y) axis. If there is a title there, remove it.
   • Under the “Gridlines” tab, unclick the value (Y) axis: major gridlines.
   • Under the “Legend” tab, unclick the show legend box
   • Click <next>. This brings you to step 4 of 4.

6. At step 4 of 4: click <finish>.

Cleaning up the graph (this is identical to the bar graph)

7. Bring the pointer to the white background until it says you are in the Chart Area.
   • Right click on the Chart Area. Select format Chart Area
   • You have two options: Border and Area. Select the option <none> for both.
   • Click on OK to go back to the graph.

8. Bring the pointer to the gray area called the Plot Area.
   • Right click on the plot area. Select format Plot Area.
   • You have two options: Border and Area. Select the option <none> for both.
   • Click on OK to go back to the graph.

9. Bring the pointer over one of the three bars
   • Right click. Select format Data Series.
   • Change the weight to the third choice.
   • Click on OK to go back to the graph.

10. Bring the pointer over the x-axis.
    • Right click. Select format axis.
• Under the pattern tab, change the weight to the third choice.
• Under the font tab, change the font to 12.
• Click on OK to go back to the graph.

11. Bring the pointer over the y-axis.
   • Right click. Select format axis.
   • Under the pattern tab, change the weight to the third choice.
   • Under the font tab, change the font to 12.
   • Under the scale tab, change the scale so that it communicates the main point of the graph.
   • Click on OK to go back to the graph.

12. Bring the pointer over the category X-axis (the name of the x-axis)
   • Right click. Select format axis title.
   • Under the font tab, change the font to 14.
   • Click on OK to go back to the graph.

13. Bring the pointer over the value Y-axis (the name of the y-axis)
   • Right click. Select format axis title.
   • Under the font tab, change the font to 14.
   • Click on OK to go back to the graph.

14. Depending on the nature of the graph, you may have to make other adjustments.