

# Simple Error Bar Charts

# What is a Simple Error Bar Chart?

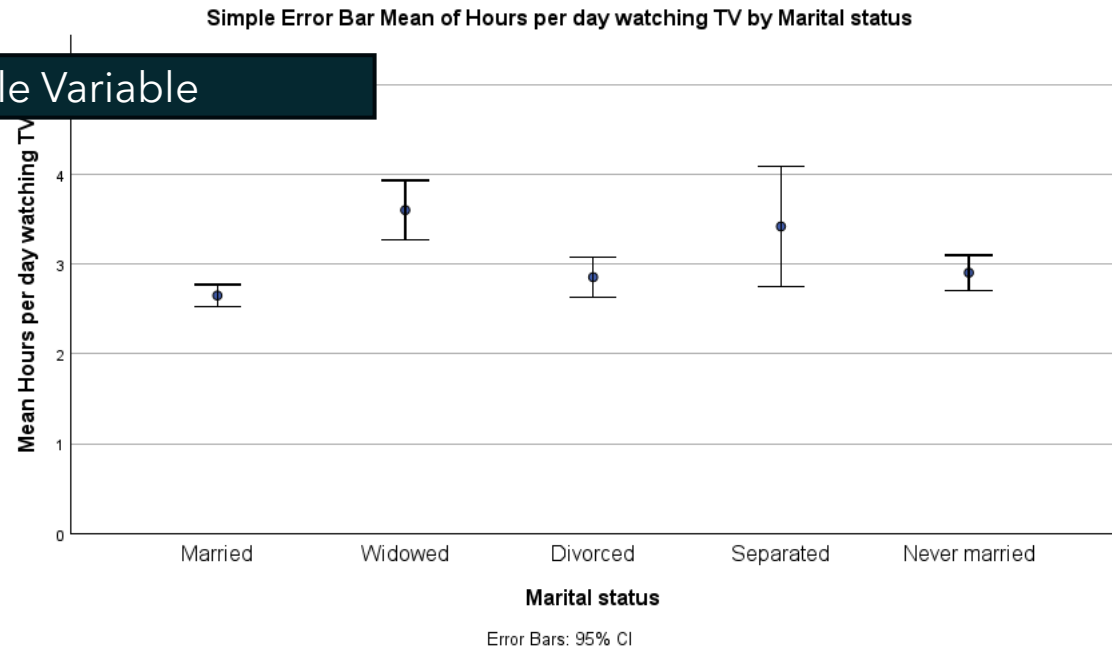
- We can compare averages of each group
- We can also see the confidence intervals and the precision of sample estimates.

**Descriptives**

Hours per day watching TV

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Married	1121	2.65	2.054	.061	2.53	2.77
Widowed	229	3.60	2.557	.169	3.27	3.94
Divorced	372	2.85	2.230	.116	2.63	3.08
Separated	69	3.42	2.804	.338	2.75	4.09
Never married	546	2.90	2.346	.100	2.71	3.10
Total	2337	2.86	2.247	.046	2.77	2.95

Scale Variable



Categorical Variable

# How Do I Create a Simple Error Bar Chart?

- It's easy to run a simple error bar chart in IBM SPSS Statistics.
- Users can go to **Graphs > Chart Builder**.
- Select **Bar** Charts. You can hover your cursor over each icon to obtain a description.
- Select chart type.
- Drag into the **Chart Preview** area.
- Drag variables onto the chart.
- Select **Statistic**.
- Adjust **Chart Appearance** and **Options**.
- Run the chart.

The screenshot shows the IBM SPSS Chart Builder interface. The main window is titled "Chart Builder" and contains a "Variables:" list on the left with variables like "id", "wrkstat", "marital", "childs", "age", "educ", and "readuc". Below this is a "Filter by:" section with the text "No categories (scale variable)". The central "Chart preview" area shows a "Simple Error Bar Mean of Hours per day watching TV by Marital status" chart. The Y-axis is labeled "Mean Hours per day watching TV" and the X-axis is labeled "Marital status" with categories: Married, Widowed, Divorced, Separated, and Never married. The chart displays mean values with 95% confidence interval error bars. Below the chart is a "Gallery" section with tabs for "Basic Elements", "Groups/Point ID", and "Titles/Footnotes". The "Basic Elements" tab is active, showing a "Choose from:" list with options: Favorites, Bar, Line, Area, Pie/Polar, Scatter/Dot, Histogram, High-Low, Boxplot, and Dual Axes. The "Bar" option is selected. To the right of the chart preview is a "Filter" button. Below the gallery are buttons for "OK", "Paste", "Reset", "Cancel", and "Help". On the far right is a "Properties" panel with tabs for "Element Properties", "Chart Appearance", and "Options". The "Element Properties" tab is active, showing "Edit Properties of:" with a list of elements: "Point1", "X-Axis1 (Point1)", and "Y-Axis1 (Point1)". Below this is a "Statistics" section with "Variable:" set to "Hours per day watching TV" and "Statistic:" set to "Mean". There is a "Set Parameters..." button. The "Display error bars" checkbox is checked. Under "Error Bars Represent", "Confidence intervals" is selected with "Level (%)" set to 95. "Standard error" and "Standard deviation" are also options. There are "Multiplier:" fields for each. At the bottom of the properties panel are checkboxes for "Stack identical values", "Display vertical drop lines between points", and "Linear Fit Lines" with sub-options for "Total" and "Subgroups".



**Thank You**