Describing Numeric Variables

2 min

Now that we've learned about some of the categorical

Preview: Docs Loading link description

[variables](#)

 in our musician dataset, it's time to explore some numeric variables — those with quantitative data. There are a lot of ways we can describe the **distribution** of a numeric variable. A distribution is a function that shows all possible values of a variable and how frequently each value occurs. This may sound pretty technical, but visualizing the distribution can make it easy to understand.

In the learning environment, the distribution of musician ages is plotted with age on the x-axis and frequency on the y-axis. From this plot, we can see:

- Ages range from about 15 to 70.

- There are few musicians under 30 or over 50 years old.

- There are a lot of musicians between the ages of 30 and 50.

This distribution might be considered bell-shaped or hill-shaped and symmetrical. This is actually a very common pattern and is called a **normal distribution**.

Viewing a plot or knowing a variable is normally distributed gives us some general information, but still nothing specific. We need exact measurements to describe where the center of the distribution is and how wide the values are spread away from that center. There are several sets of

Preview: Docs Loading link description

[statistics](#)

 we may use for these measurements, and we will need to know when to use which combination.

Age distribution