CARiH

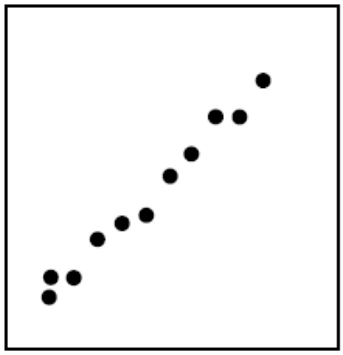
Scatter Plot

A scatter plot is a graphic portrayal of the link between two variables. A scatter plot can prove a link between two variable. After a brainstorming multiple causes and effects using a fishbone (cause and effect) diagram, a team might use a scatter diagram to check the relationship between a particular cause and effect.

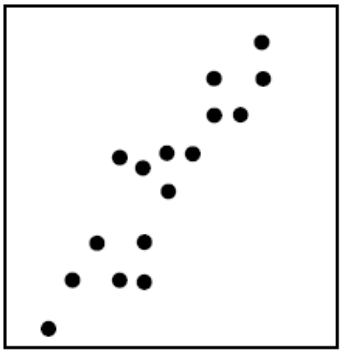
Each variable in a scatter plot has an axis of its own. The resulting graph could show a positive or negative correlation. It is vital to understand correlation does not prove causation.

Steps:

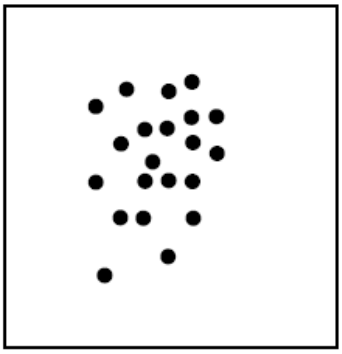
1) Gather the data for two variables. Make sure the data stay paired.
2) Decide which factor you will plot on which axis. It may help to put the suspected cause on the horizontal (X) axis, and the assumed effect on the vertical (Y) axis.
3) Plot the X and Y data pairs on the diagram
4) Study the pattern that the plotted data points create to see what you have learned and decide on your next steps.



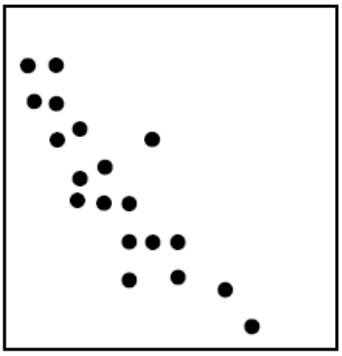
Strong positive correlation



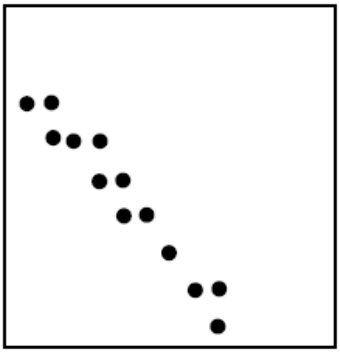
Moderate positive correlation



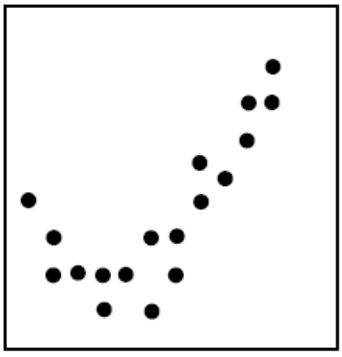
No correlation



Moderate negative correlation



Strong negative correlation



Curvilinear relationship