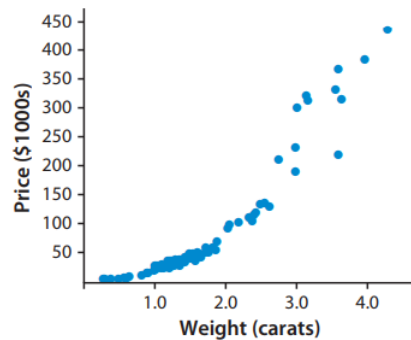


2.3 Correlation (Part 2)

When interpreting the correlation, we have to take into account the shape of the scatterplot.

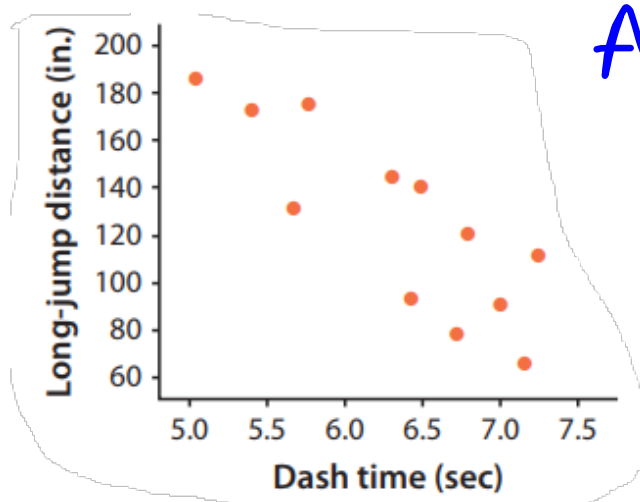
A correlation close to 1 or -1 doesn't necessarily mean an association is linear.

For example, this scatterplot is clearly nonlinear, yet the correlation is $r = 0.93$.



Correlation *alone* doesn't provide any information about form. To determine the form of an association, you must look at the scatterplot.

Example: The scatterplot shows the relationship between 40-yard-dash times and long-jump distances from the example in Section 2.2. The correlation is $r = -0.838$. Interpret this value in context.



As the dash time increases, the long jump distance decreases.