- Now, one problem with covariance as we've calculated it is that the score we end up with depends on the measurement scales associated with our variables.
- In other words, the covariance value isn't standardised.

- We can divide any value by the standard deviation and that will give us the distance from the mean in standard deviation units….

- We can divide our covariance value by the standard deviations of our two variables (actually standard deviation of x multiplied by standard deviation of y) – in other words:

$$= \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{N - 1 s_x s_y}$$

- This is called the *Pearson product-moment correlation coefficient* and ranges from -1 (perfect negative correlation) to +1 (perfect positive correlation) with 0 meaning on correlation at all.