

# Correlation is *not* Causation

- When interpreting correlation data one common pitfall is to assume that the score on one variable *causes* a particular score on the other. This is wrong!
- Very often, common sense would suggest causation – e.g., time spent studying improves exam score. Again, you cannot make any claim about causation from correlation.
- There may be a third variable that we don't know about – in this case, maybe a positive attitude to studying.
- Additionally, spurious correlations can be found all over the place...

# Correlation is *not* Causation

**Number of people who drowned by falling into a pool**

correlates with

**Films Nicolas Cage appeared in**

