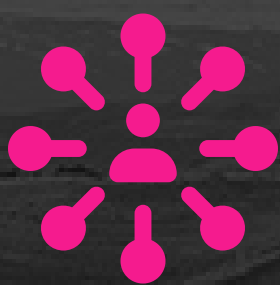


CAUSATION OR CORRELATION?

Separating correlation from causation can be **tricky**: using the three established criteria of association, temporality, and nonspuriousness can help make this distinction easier.



ASSOCIATION

The two events appear to occur together often.

Association is also called correlation but is NOT sufficient to prove causation.



TEMPORALITY

The occurrence of the cause is before the effect. An effect cannot occur before its cause.



NONSPURIOUSNESS

Ensure that the relationship between two variables is not actually due to some other hidden third variable.

Randomized experiments are the best way to prove causality. Always use caution when inferring causation from observational studies.