

be sure that some alternate force is not influencing both the presumed cause and the presumed effect. For instance, suppose that you discover a correlation between the separation of private and public spheres and the incidence of women's rights. You might also discover that some third element (e.g., economic status of the society) caused the separation of the spheres and simultaneously caused the low incidence of women's rights. In this instance, the economic status of the society, not the separation of public and private spheres, is the real cause of the low status of women's rights.

So if correlation does not equal causation, how can correlation support a causal relationship? The answer is that while correlation does not prove causation, the absence of correlation proves the absence of causation. Cause-and-effect relationships cannot be directly proved. They can be supported only by the failure of successive attempts to prove them false. Karl Popper (yes, the same Karl Popper for which this form of debate is named) argued that a "genuine test of a theory is an attempt to falsify it, or to refute it."⁵ He believed that only by repeated attempts to falsify (or disprove arguments) can debaters begin to gain confidence in the validity of an argument. Correlation is an attempt to falsify a cause-and-effect statement. Repeated findings of correlation are the equivalent of repeated failures to falsify the lack of a cause-and-effect argument. Thus, a correlation is one bit of evidence that can be put toward the support of a cause-and-effect argument. Although correlation (and all of Mill's other methods) are not perfect proofs of causality, they put causal relationships to the test and thus are appropriate tools to give added support to cause-and-effect relationships.

Modern methods of social science have developed more sophisticated means of supporting cause-and-effect arguments: multiple regression, time-series analysis, etc. Still, all these sophisticated methods are based on associational methods. Although all cause-and-effect arguments are not the same, all of them can, to some degree, be supported in similar ways. Associational methods are relevant to all kinds of cause-and-effect arguments. In the next section we explore some different kinds of causal arguments.

TYPES OF CAUSAL ARGUMENT

"X causes Y" is the simplest statement of a cause-and-effect claim. Yet this statement can have a variety of subtly different meanings. For instance, it can mean that "without X, Y cannot occur," or "with X, Y is virtually guaranteed," or "X contributes to Y." These are a few of the different meanings that "X causes Y" can have. To explore these and other meanings of causal statements, we must distinguish at least four different kinds of causal arguments.

Necessary causal arguments state that without the suspected cause, the effect cannot occur. The statement that "sex is a necessary cause of pregnancy" is an example of a necessary causal argument that is simple but technically incorrect.⁶ According to this argument, without sex, pregnancy cannot occur. Saying that sex is necessary for pregnancy is not the same as saying sex assures pregnancy. Sex is a necessary but not a sufficient condition for pregnancy—a woman doesn't become pregnant each time she engages in intercourse.