

S-ID Golf and Divorce

Alignments to Content Standards: S-ID.C.9

Task

Researchers have noticed that the number of golf courses and the number of divorcees in the United States are strongly correlated and both have been increasing over the last several decades. Can you conclude that the increasing number of golf courses is causing the number of divorcees to increase?

Either justify why a causation can be inferred, or explain what might account for the correlation other than a causal relation.

IM Commentary

This is a simple task addressing the distinction between correlation and causation. Students are given information indicating a correlation between two variables, and are asked to reason out whether or not a causation can be inferred. The task would be well-suited either as an introduction to this distinction, or as an assessment item.

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Solution

No, we cannot conclude that the increasing number of golf courses is causing the number of divorcees to increase. In general, correlation does not imply causation.

There are a number of factors that may be increasing the number of golf courses and a

number of factors causing the rise in number of divorcees. These factors may be (and are often) different. For example, there might be a rise in the popularity of the sport of golf that is in part causing the increase in the number of golf courses. However, the number of divorcees might be increasing due in part to the relative ease with which one can obtain a divorce now as opposed to, say, 10 years ago.

There may even be some global factors that are causing both numbers to increase, for example the rise in global population (i.e., there are more people on the planet earth, period). However, this rise in population would not necessarily create a link between the sport of golf and divorcees.



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