

I
by B N

Submission date: 03-Jul-2021 09:34PM (UTC-0400)

Submission ID: 1615396461

File name: causation.edited.docx (16.23K)

Word count: 492

Character count: 2830

Question of Causation

Name

Institution

Course

Instructor

Date

Question of Causation

Research plays a critical role in individuals' life because it enables them to explore developmental topics and explain the cause and effects. Therefore, experiments need to be conducted to get the causal relationship among variables. Nevertheless, most developmental issues cannot be explored through actual experiments because some are unethical and logically impossible. Some experiments will require subjecting individuals to toxic situations to get the best results that are not possible, for instance, when exploring if cigarettes cause cancer. The researchers will need to take babies to the hospital and divide them into two groups, where the first will be forced to smoking and the other group prevented from smoking. When they get older, the two groups will be compared on the number of people with cancer-based on their smoking habits.

A lurking variable is a variable that is not realized and not controlled. This variable has a critical and substantial impact on the variables of interest. Causation in statistics can be a challenging thing because appearances can often be deceiving. Although individuals might recognize a significant association between two variables, it does not prove a cause-and-effect relationship (Described and Captioned Media Program, 2013). Therefore, one of the biggest challenges is proving that causation comes from the hidden factors that are not instantaneous ostensible because they lurk in the background. Another term for lurking variables is extraneous variables.

In the studies, Described and Captioned Media Program (2013) explains that sometimes causation appears to be the only prudent explanation of the relationship between explanatory and response variables. Therefore, the website demonstrates an example of causation that scientists utilize the past experiences of how researchers untangle the association between smoking and

lung cancer. By delving into history, the video presents how cartoons were used for advertising cigarettes on television and people smoking while in hospital. However, by world war I, cigarettes smoking gained tremendous popularity in America when given to soldiers to boost morale. The increase in tobacco resulted in a surge in cancer rates, the first study noticed by dr. Richard Overholt realized that nonsmokers recovered faster and had a higher survival rate than smokers. A retrospective study is also presented with used categorical values and focused on smoking habits. Therefore, the studies concentrated on practices that are past behavior that they did not have control over. The lurking variable was individuals' genetics which could stimulate cancer development. The authors successfully reduced the impact by using an animal study by applying tar on animal skin and ears, causing tumors to develop and exposed them to smoke, which indicated an increase in smoke causes an increase in cancer growth. This has reduced the number of people smoking to less than twenty percent in America. Since the study is observational, I would reduce the impact of lurking variables by identifying the hidden factors.

Reference

Described and Captioned Media Program. (2013). The Question of Causation.

<https://dcmp.org/media/8685-the-question-of-causation>

ORIGINALITY REPORT

0%

SIMILARITY INDEX

0%

INTERNET SOURCES

0%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES

Exclude quotes On

Exclude matches Off

Exclude bibliography On