# Article information:

Dependent and Independent Variables
<https://www.nlm.nih.gov/nichsr/stats_tutorial/section2/mod4_variables.html>

# Article summary:

1. In health research, there are two types of variables: independent variables, which influence dependent variables, and dependent variables, which are the result of the independent variable.

2. Confounding variables can affect the relationship between independent and dependent variables and lead to bias in study design or analysis.

3. To determine causality between variables, researchers look for temporal precedence, covariation of cause and effect, and lack of plausible alternative explanations.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article provides a clear explanation of dependent and independent variables in health research. It highlights the importance of considering confounding variables and bias in study design and analysis. However, there are several areas where the article could be improved.

One potential bias in the article is the lack of sources for some definitions and claims. While it does provide sources for some terms, such as independent variable and dependent variable, other terms like confounding variable and bias are not sourced. This raises questions about the accuracy and reliability of the information provided.

Additionally, the article only presents one example to illustrate the concept of dependent and independent variables. While this example is useful in understanding the concept, it would have been beneficial to include more diverse examples from different fields of research to demonstrate how these variables can vary across studies.

The article also fails to explore counterarguments or alternative perspectives on the topic. For instance, it does not discuss any potential criticisms or limitations of using natural experiments to study relationships between variables. Including these counterarguments would provide a more balanced view of the topic.

Furthermore, there is a lack of evidence provided to support some claims made in the article. For example, when discussing selection bias, it states that an online website that rates physicians may suffer from selection bias because individuals with extreme experiences are more likely to provide ratings. However, no evidence or examples are given to support this claim.

The article also includes promotional content by mentioning ethical obligations in research without providing any context or relevance to the topic at hand. This information seems out of place and does not contribute to a critical analysis of dependent and independent variables.

Overall, while the article provides a basic understanding of dependent and independent variables, it lacks depth and critical analysis. It could benefit from providing more sources for definitions and claims, including diverse examples, exploring counterarguments, providing evidence for claims made, and removing irrelevant promotional content.

# Topics for further research:

* Criticisms of natural experiments in health research
* Examples of confounding variables in medical studies
* Importance of controlling for bias in health research
* Different types of selection bias in healthcare studies
* Impact of extreme experiences on online physician ratings
* Ethical considerations in health research design

# Report location:

<https://www.fullpicture.app/item/6d30b8f176af913a00581a1826d078f6>