## Correlations and confounding variables essay sample

Health & Medicine, Obesity



- 1. Explain what the terms correlations AND confounding variables mean (in your own words, and cite the source). Review the links in the Background Information to learn about these terms.
- 2. Introduce and briefly describe the study in one paragraph.
- 3. Discuss the correlations and confounding variables described in the study.
- 4. Finally, remind me of your SLP research question and your hypothesis.

  Knowing what you've learned about correlations and confounding variables:

  a) Identify 1 correlation you would look for in your research.
- b) Identify 2 possible confounding variables that would affect the research topic you have been focusing on throughout the SLP.

Confounding variables, also known as third variables are those variables that a researcher is unable to eliminate or control when determining the research design. When left uncontrolled, confounding variables damage the internal validity of the research. This means that the research design deviates from the principle of cause and effect in a quantitative study (O'Donnell & World Bank, 2007)

As a result, a confounding variable when left uncontrolled can have a widespread effect on the relation between the dependent and the independent variable. The most significant effect of a confounding variable on the research design is that the researcher might erroneously reject the null hypothesis after analyzing the results incorrectly and thereby establish a false correlation between the independent and the dependent variable (Wagstaff, 2011).

Correlation in research refers to a statistical technique that is used to show whether and the degree of the association between two or more variables. Correlation involves statistical relationships that express dependence between two sets of data or two random variables. Correlation measures whether one variable is dependent on another and the extent of such dependence.

## **Introduction of the study**

This study involved an evaluation of the literature on the factors influencing the high prevalence of obesity among Latino children. The study aimed to provide future directions for any studies carried out in the field as well as provide nursing implications of the high prevalence of obesity. The study chose data from twenty four other studies carried out in the same field for review. The study found that factors like activity, acculturation, diet, the environment and genetics influence the overweight and obesity status in Latino children.

## Correlations and confounding variables

The two confounding variables described in the study are immigration status and acculturation. The immigration status refers to the fact that due to the movement of people, there might be an influx of people from other areas. If these cases have not been residing in the areas of study for a considerable interlude of time before the studies, it cannot be correctly inferred that their overweight and obesity status was influenced by their surroundings. The lack by the researcher to decipher this and control for the variable might result to

the erroneous correlation of obesity in such a case to the environmental factors in the Latino nations (Kornides, Kitsantas, Yang & Villarruel, 2011).

Acculturation refers to the process of psychological and cultural change as a result of the meeting of two cultures. More often than not, when two cultures meet, the smaller culture adopts the ways of the dominant culture and this has an implication on their health as eating is an integral part of culture. It is not documented exactly how this happens. It might therefore be fallacious to correlate overweight and obesity status on acculturation.

Different types of correlations have been discussed throughout the study. For instance, the correlation between the birth weight and subsequent adiposity has been given significance in the study. The review of the literature exposed that many studies analyzed for the correlation between obesity and social economic status. Other correlations explored in the study include physical inactivity and obesity, television watching and obesity for children from different social economic statuses and sweet and snack consumption and television watching among others.

My SLP research question was establishing why there was increased incidence of child deaths as a result of road accidents in spite of the much technological advancements that have been commissioned to counter that. The study hypothesized that if parents were made more aware of how to properly restrain their children according to their age, height, and weight, then the rate of deaths and injury from car crashes for kids ages two to fourteen will drop dramatically.

In that research, I would seek the correlation between the knowledge on how to restrain the children by the mothers and the incidence of accidents. I would expect other causes of road accidents and negligence on the part of the mothers to affect the results of the research as confounding factors.

## References

Kornides, M., Kitsantas, P., Yang, Y., & Villarruel, A. (2011). Factors Associated With Obesity

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