

NRS 445 Topic 3 DQ 1

Compare independent variables, dependent variables, and extraneous variables. Describe two ways that researchers attempt to control extraneous variables. Provide an example of how this is applied using a peer-reviewed, primary research article.

Initial discussion question posts should be a minimum of 200 words and include at least two references cited using APA format. Responses to peers or faculty should be 100-150 words and include one reference. Refer to "RN-BSN Discussion Question Rubric" and "RN-BSN Participation Rubric" located in Class Resources, to understand the expectations for initial discussion question posts and participation posts, respectively.

Dependent variables are what is being measured in a research study. The independent variable is usually what is being studied such as the drug, treatment, and/or procedure being investigated. An independent variable can stand alone unlike the dependent variable. Extraneous variables were not foreseen or known at the beginning of the study in progress (Faulkner, et al., 2022). The dependent variable can only change in relation to the independent variable. Extraneous variables are not foreseen but are attempted to be controlled during the research.

There are ways that researchers attempt to control extraneous variables such as randomization and environmental. With randomization, researchers assign individuals to treatments (e.g. high training volume vs. low training volume), any differences in participant ability between groups should be roughly evenly distributed. This should minimize the problem of participant variables (Zach, 2020) Another way would be creating a consistent environment across the population being researched. This could minimize environmental variables between groups with things you can control around their such as lighting, temperature, noise and any other environmental factors that are controllable.

Extraneous Variable: Definition & Examples – Statology By Zach Container: Statology Year: 2020
URL: <https://www.statology.org/extraneous-variable/>

Falkner A., Green S. Z., Helbig J., Johnson J., McNiff P., Petrick M., & Schmidt, 2022. Grand Canyon University. Nursing Research: Understanding Methods for Best Practice (Second Edition). :
https://bibliu.com/app/#/view/books/100000000588/epub/Chapter1.html#page_32

Response 1:

Hi Claudia, great response. I also found that anything that is not the independent variable has the potential to affect the results is called an extraneous variable (Extraneous Variables in Research: Types & Examples, 2023). These can be a natural characteristic of the participant, such as intelligence level, gender, or age, for example, or it could be a feature of the environment, such as lighting or noise. So, it is always difficult to foresee how these things can factor in to the end result of the research study. We