

Model Drawings Assignment

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I have no known conflict of interest to disclose.

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Models Drawing Assignment

Prior to conducting a statistical analysis using moderation or mediation, one must demonstrate understanding of the conceptual relationship between the variables to be tested. The following descriptions and figures will be used to demonstrate a moderator and mediation analysis to address the respective research problem and research questions. For each analysis type, the research problem, research question, hypothesis, variables, and a figure of the respective models (Figures 1 and 2) will be presented.

Moderator analysis

Research problem: The relationship between neuroticism and depression as moderated by gender amongst doctoral students

RQ1: To what extent, if any, does gender moderate the predictive relationship between neuroticism and depression?

H₀1: Gender does not significantly moderate the predictive relationship between neuroticism and depression.

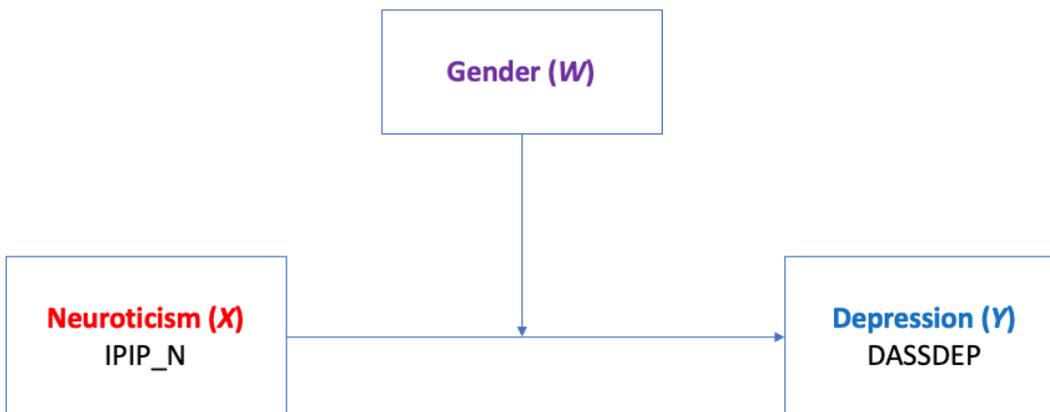
H₁1: Gender significantly moderates the predictive relationship between neuroticism and depression.

Variables:

- Gender (a categorical variable with a nominal level of measurement)
- Race (a categorical variable with a nominal level of measurement)
- Depression, as measured by DASS-Depression (a continuous variable with interval level of measurement)
- Neuroticism, as measured by IPIP-50 (a continuous variable with interval level of measurement)

Figure 1

Simple Moderator Analysis Conceptual Model Using Hayes Model 1



Mediation Analysis

Research Problem: It is not known to what extent, if any, stress mediates the predictive relationship between neuroticism and depression.

RQ: To what extent, if any, does **stress** mediate the predictive relationship between **neuroticism** and **depression**?

H0: Stress does not significantly mediate the predictive relationship between neuroticism and depression.

H1: Stress significantly mediates the predictive relationship between neuroticism and depression.

Variables:

- Stress (M), as measured by DASS-Stress (DASSSTRS)
- Neuroticism (X), as measured by IPIP-50 (a continuous variable with interval level of measurement)
- Depression (Y), as measured by DASS-Depression (a continuous variable with interval level of measurement)

Figure 2

Simple Mediation Analysis Conceptual Model Using Hayes Model 4

