

### Unit 8 Assignment Introduction Script

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Imagine that you have been asked to analyze and communicate a data set using inferential statistics. Correlational research investigates *how* changes in one variable correspond with changes in one or more other variables. For example, you can use correlational research to make a prediction on how many students will graduate with a 3.5 GPA or higher.

Causal-comparative or ex post facto research, investigates possible cause-and-effect relationships among variables. For example, what are the differences between smokers and non-smokers?

*Reliability* refers to the *consistency* of the research being conducted. *Validity* refers to the *accuracy* of the research being conducted.