In **quantitative** research, hypotheses are used. In **qualitative** research, hypotheses are not used; instead, inquirers use only research questions. Because researchers test hypotheses using statistics, and statistics are not used in qualitative research, hypotheses in qualitative research are not appropriate.

In **quantitative** research, the investigator identifies multiple variables and seeks to measure them. In **qualitative** research, the term **variable** is not used, and instead the inquirer seeks to gather information on a single concept – a central phenomenon.

In **quantitative** research, researchers often test theories, broad explanations that predict the results from relating variables. In **qualitative** research, theories are typically not tested. Instead, the inquirer asks participants in a study to share ideas and build general themes based on those ideas.

In **quantitative** research, the investigator employs a closed-ended stance by

identifying variables and selecting instruments to collect data **before** the study begins. Quantitative research questions and hypotheses do not change during the study. In **qualitative** research, the inquirer uses more of an open-ended stance and often changes the phenomenon being studied or at least allows it to emerge during the study. The research questions may change based on the responses of the participants. This makes **quantitative** research more deductive and **qualitative** more inductive.

In **quantitative** research, the investigator seeks to measure differences and the magnitude of those differences among two or more groups. In **qualitative** research, inquirers do not compare groups or relate variables. Instead, the researcher seeks a deep understanding of the views of one group or single individuals. (p. 133)

Creswell, John W. 2005. *Educational Research*. Upper Saddle River, N.J.: Pearson Merrill Prentice Hall