Comparison of Research Methods

AP Psychology

Method	***Description***	***Uses and Advantages***	***Potential Limitations***
Experimental	Manipulation of variables to assess cause and effect	-Demonstrates causal relationships -Replicability: study can be repeated to see if the same findings emerge -Maximizes control over relevant variables	-Generalizability outside the laboratory -Some complex phenomena cannot be readily tested using pure experimental methods
Correlational	Examines the extent to which two or more variables are related and can be used to predict one another	-Reveals relations among variables as they exist outside the laboratory -Allows quantification of relations among variables (correlational coefficients and scatterplots)	-Cannot establish causation
Case Study#	In-depth observation of a small number of cases	-Describes psychological processes as they occur in individual cases -Allows study of complex phenomena not easily reproduced experimentally -Provides data that can be useful in framing hypotheses	-Generalizability to the population -Replicability: study may not be repeatable -Researcher bias -Cannot establish causation
Naturalistic Observation#	In-depth observation of a phenomenon as it occurs in nature	-Reveals phenomena as they exist outside the laboratory -Allows study of complex phenomena not easily reproduced experimentally - Provides data that can be useful in framing hypotheses	-Generalizability to the population -Observer effects: the presence of an observer may alter the behavior of the participants -Researcher bias -Cannot establish causation
Survey#	Asking people questions about their attitudes, behavior, etc.	-Reveals attitudes or self-reported behaviors of a large sample of individuals -Allows quantification of attitudes or behaviors	-Self-report bias: people may not be able to report honestly or accurately - Cannot establish causation

= "Descriptive" Studies (none of these can establish causation!!)