

Chapter 1

Science



**ASSIGN
BUSTER**

Chapter 1 hindsight bias - Tendency to believe that after learning an outcome, that we would've foreseen it. Once we're told something, it seems obvious. hindsight bias and overconfidence often lead us to overestimate our intuition scientific inquiry, curious skepticism, and humility can help shift to reality critical thinking - thinking that doesn't blindly accept arguments and conclusions. Rather, it examines assumptions, discerns hidden values, evaluates evidence, and assesses conclusions theory - an explanation using an integrated set of principles that organizes observations and predicts behaviors or events hypothesis - a testable prediction, often implied by a theory operational definition- a statement of the procedures (operations) used to define research variables replication - repeating the essence of a research study, usually with different participants in different situations, to see whether the basic finding extends to other participants and circumstances Good theories: organize and link observed facts imply hypotheses that offer testable predictions and sometimes practical applications case study - an observation technique in which one person is studied in depth in the hope of revealing universal principles can suggest hypotheses, but studying an unrepresentative individual may lead to false conclusions survey - a technique for ascertaining the self-reported attitudes or behaviors of people, usually by questioning a representative, random of them false consensus effect - the tendency to overestimate the extent to which others share our beliefs and behaviors the best basis for generalizing is from a representative sample of cases population - all the cases in a group, from which samples may be drawn for a study random sample - a sample that fairly represents a population because each member has an equal chance of inclusion naturalistic observations - watching and recording

<https://assignbuster.com/chapter-1-critical-essay-samples/>

the behavior of organisms in their natural environment - it doesn't explain, it describes Correlation indicates the possibility of a cause-effect relationship, but it doesn't prove causation illusory correlation - the perception of a relationship where none exists. We are likely to notice and recall instances that confirm our belief When we notice random coincidences, we may forget they're random and see them as correlated. We can easily deceive ourselves by seeing what's not there (arise from our sensitivity to dramatic or unusual events) Unlike correlation, an experiment manipulates a factor to determine its effect double-blind procedure - an experimental procedure in which both the research participants and the research staff are ignorant about whether the participants have received the treatment or a placebo placebo effect - experimental results cause by expectations alone; any effect on behavior caused by the administration of an inert substance or condition, which is assumed to be an active agent experimental condition - exposes participants to the treatment/one version of the independent variable control condition - contrasts with experimental condition and serves as a comparison for evaluating the effect of the treatment randomly assigning minimizes preexisting differences between those assigned to the different groups When it is safe to generalize from a sample/when an observed difference is reliable: Representative samples are better than biased samples Less-variable observations are more reliable than those that are more variable More cases are better than fewer statistical significance - When sample averages are reliable and the difference between between them is relatively large, the difference is significant - probably not due to chance variation between the samples Indicates the likelihood that a result will happen by chance, doesn't indicate importance of result Psychology's current <https://assignbuster.com/chapter-1-critical-essay-samples/>

perspectives: Neuroscience - how the body and brain enable emotions, memories, and sensory experiences Evolutionary - how the natural selection of traits promotes the perpetuation of one's genes Behavior genetics - how much our genes and our environment influence our individual differences Psychodynamic - how behavior springs from unconscious, drives, and conflicts Behavioral - how we learn observable responses Cognitive - how we encode, process, store, and retrieve Social-cultural - how behavior and thinking vary across situations and cultures