

Positivism	Realism	Constructivism
Reality exists independently of what anyone knows, thinks, or believes about it – it “is.”	Reality exists independently of what anyone knows, thinks, or believes about it, <b>but</b> human perceptions or beliefs about what exists are an integral part of reality	Reality is a social construction that is created when people interact and does <b>not</b> exist independently of specific individuals and/or groups interacting with one another
Science deals with explaining causal relationships and most importantly direct cause and effect relationships.	Science deals with understanding phenomena in their totality, which includes, but is not limited to direct cause and effect, and also includes the effects (expressions) of human perceptions, beliefs or values	Science deals with understanding how <b>individuals</b> experience and perceive reality; the researcher’s job is to understand how others experience and perceive reality and/or to create meaning from those experiences through interaction
The researcher should be isolated from the phenomena that s/he studies and ideally has no (or minimal) effect on what is measured.	The researcher cannot be isolated from what s/he studies, but it is the researcher’s responsibility to avoid <b>bias</b> in research and to clearly distinguish between findings (results, data, information) and his/her interpretation of the findings	The researcher cannot help but intervene in the processes or phenomena s/he studies; research findings are socially constructed and the researcher’s interpretation of what s/he observes is a valid research finding in and of itself
The researcher’s objective is to generalize beyond one case; individual differences are of little interest generally and are treated largely as part of the variance (deviation from the central tendency) of the group.	The researcher’s objective is to understand patterns and to generalize, but individual differences are important and a complete understanding requires an explanation that accounts for the full range of responses	Some constructivists treat every individual’s experience and perception as a separate, individual reality and argue that each individual reality is equally “true” and valid, but most do try to generalize
Strong reliance on the traditional deductive model of the scientific method in which theories generate formal hypotheses that are tested by collecting empirical data; stresses formal and/or statistical hypotheses	Relies on a more flexible model of the scientific method in which both the deductive (theory or hypothesis testing) and inductive (theory or hypothesis building) components play equally important roles; uses both formal hypotheses (statistical or not) and the less structured proposition or thesis	Formal hypotheses and even the less structured proposition are not a requirement and may or may not be used, depending on the researcher; a more post-modern view argues that since reality is a social construction meaning emerges from the interaction between the researcher and the phenomena s/he studies
Tends to rely heavily on the experimental group of research designs	Relies on all three groups of research designs; often favors a multi-stage design that employs designs from more than one group	Research design <i>per se</i> is often a relatively unimportant consideration because the issues of internal and external validity are not particularly meaningful indicators of the quality of research
Tend to favor research methods that generate “quantitative” (numbers) data, such as scales, indices or tests	Tends to favor a “multi-method” approach in which both “quantitative” (numbers) and “qualitative” (narrative) data are collected; may not see distinction between the two types of data as important or meaningful	Tends to rely on research methods that generate narrative data; emphasis on methods that permit the researcher to gain an in-depth understanding of how the participant experiences and perceives of reality
Strong emphasis on identification of independent and dependent variables in the strict sense of the term – e.g., the independent variables are <b>causal</b> and variance in the dependent variable can be explained fully (or almost fully) by variance in the independent variables	May identify true independent and dependent variables, but often rely more on “predictor” and “outcome” variables; related to less interest in causality as the primary research concern.	May or may not formally identify variables in the research process and often, when they are identified, this is a <b>result</b> of the research process rather than a starting point
Precision of instruments -- More precision is virtually always better. A more precise measurement is usually assumed to be a better instrument because of the emphasis on direct causality and detecting	Precision of instruments -- High precision is “good,” but higher precision is <b>not</b> synonymous with a better understanding. The researcher must evaluate the relationship between precision and understanding,	Precision of instruments – Usually – but not always – precision <i>per se</i> is of relatively little importance; tied to importance of in-depth understanding and tendency to rely on narrative data.

causal effects; tied to preference for ordinal data.	and must determine and justify the level of precision; tied to multi-method approach.	
Reliability of instruments -- Reliability consists largely of consistency (across respondents, at different times, with the same respondent at two times, etc.).	Reliability includes consistency and repeatability, but realists tend to emphasize consistency across multiple measures as much or more than across respondents, times, etc.; e.g., do multiple measures of the same construct produce internally consistent and congruent responses from individuals. Reliability also depends, especially for narrative data, on adequately capturing the response, e.g., recording the response adequately.	Reliability does not depend on consistency, but rather depends largely on the degree to which the researcher captures and understands the meaning that the respondent wants to convey. Reliability goes beyond capturing "what was said" to understanding "what was meant."
Validity of instruments -- Validity is the correspondence between construct and variable (does it measure what it is alleged to measure). An important aspect of validity is that the measure requires <b>little or no interpretation</b> by the researcher.	Correspondence between construct and variable is critical, but the validity of an item also requires that it have the right meaning for the respondent. The researcher cannot determine whether items are valid without probing their meaning to potential respondents (usually during pre-testing). Measures requiring interpretation by the researcher (e.g., open-response questions) are valid, but the researcher must use a transparent process of interpretation and cross-check with others (respondents and/or other researchers).	Validity relies heavily on the researcher's ability to interpret the meaning conveyed by the respondent. Since meaning is constructed through interaction, the researcher's own experiences and perceptions inevitably come into play in this process. As long as the researcher faithfully reports this process, inserting the researcher's individual interpretation into the research process does not threaten validity.