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Research Design Defined

- Plan for collecting research
- Arrangement of conditions for collection and analysis of data that combines research purpose and procedure
- Overall approach to conducting research projects through data collection, interpretation, analysis, and discussion

Source: Pritha Bhandari, Scribbr.com <https://tinyurl.com/2t8j6s2v>

Characteristics of Research Design



Neutrality



Reliability



Validity



Generalization

Source: Leverage Edu.com, <https://tinyurl.com/bdz9pwjz>



Source: Delbert Miller and Neil Salkind, *Handbook of Research Design*, Indiana University, 2002

Research Design Categories

- **Descriptive** - identifies the characteristics, frequencies, trends, and categories, useful when not much is known yet about the topic or problem
- **Experimental** - establishes a relationship between the cause and effect of a particular happening
- **Correlational** - establishes a relationship between two closely-related topics or variables
- **Diagnostic** - examines the underlying cause of a situation or phenomenon
- **Explanatory** - expands or explores a researcher's ideas and theories

Research Design Types

- **Exploratory Research** - process of investigating a problem that has not been studied or thoroughly investigated before
- **Constructive Research** - research based upon theories, hypotheses and case studies, used to test theories
- **Empirical Research** – uses both direct and indirect forms of observation and analysis

Research Design Types

- **Cohort study** - longitudinal research that takes a cross-section of a cohort (a group of a people who have a common trait) at predetermined time intervals
- **Cross-sectional study** - examines data from a population or a representative sample of the population at a specific point in time
- **Longitudinal study** - type of study in which the same variables are observed repeatedly over a short or long period of time
- **Cross-sequential study** - combines longitudinal and cross-sectional research methods to compensate for flaws inherent in each one

Research Design Questions

- Which design will provide needed information?
- How feasible is each option?
- How valid and reliable do the findings need to be?
- Are there any ethical concerns about a specific design?

Source: Shona McCombes, Scribbr.com, <https://tinyurl.com/4szbez42>