

Research Design

1. Definition of Research Design

1-Lindquist defined research design as “the plan, structure and strategy of investigation conceived so as to obtain answer to research question” (1956, as cited in Broota, 1989, p. 3).

2-“A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure” (Selltiz et al., 1962, as cited in Kothari, 2004, p. 31).

3-A research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems. The plan is the complete scheme or programme of the research. It includes an outline of what the investigator will do from writing the hypotheses and their operational implications to the final analysis of data (Kerlinger, 1986, p. 279).

4-A traditional research design is a blueprint or detailed plan for how a research study is to be completed—operationalizing variables so they can be measured, selecting a sample of interest to study, collecting data to be used as a basis for testing hypotheses, and analyzing the results (Thyer, 1993, p. 94).

5-It is when the researcher tries to answer questions related to the investigation using “what, where, when, how much, by what means” (Kothari, 2004, p. 31).

6-“[T]he research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data” (Kothari, 2004, p. 31). More interestingly, the research design forms a plan in advance which could clarify the research objectives (Kothari, 2004, p. 32).

2. Elements of a Research Plan/Design

2.1. Morrisson’s Steps of Planning Research (1993, as cited in Cohen et al., 2000, pp. 73-74)

1. orienting decisions (the general aims, the audience, the constraints, time frame, ethical issues, resources).
2. research design and methodology (the main methodology, validity and reliability, kinds and tools of data, specifying the researcher).
3. data analysis (qualitative or quantitative data analysis).
4. presenting and reporting the results (the audience of the report, specifying time of writing the report, indicating place of publication, indicating ways of presenting data).

2.2. Cohen et al.’s Four-stage Model of Research Plan (2000, p. 88)

Stage 1 Identify the purposes of the research.

Stage 2 Identify and give priority to the constraints under which the research will take place.

Stage 3 Plan the possibilities for the research within these constraints.

Stage 4 Decide the research design.

2.3. Kothari’s elements of a research design (2004, p. 32)

- (a) a clear statement of the research problem;
- (b) procedures and techniques to be used for gathering information;
- (c) the population to be studied;
- (d) methods to be used in processing and analysing data.

2.3. Cohen et al.'s Detailed Steps of Research Planning (2000, pp. 73-74)

- 1 the general aims and purposes of the research;
- 2 how to operationalize research aims and purposes;
- 3 generating research questions;
- 4 identifying and setting in order the priorities for and constraints on the research;
- 5 approaching the research design;
- 6 focusing the research;
- 7 research methodology;
- 8 ethical issues;
- 9 audiences of the research;
- 10 instrumentation;
- 11 sampling;
- 12 time frames;
- 13 resources required;
- 14 validity and reliability;
- 15 data analysis;
- 16 verifying and validating the data;
- 17 reporting and writing up the research.

3. Design Decisions (Kothari, 2004, p. 31): The design decisions should be related to:

- (1) What is the study about?
- (2) Why is the study being made?
- (3) Where will the study be carried out?
- (4) What type of data is required?
- (5) Where can the required data be found?
- (6) What periods of time will the study include?
- (7) What will be the sample design?
- (8) What techniques of data collection will be used?
- (9) How will the data be analysed?
- (10) In what style will the report be prepared?