

## Research Designs

Oskar Blakstad 1.9M reads

**Different Research Designs** The design is the structure of any scientific work. It gives direction and systematizes the research. Different types of research designs have different advantages and disadvantages.

The method you choose will affect your results and how you conclude the findings. Most scientists are interested in getting reliable observations that can help the understanding of a phenomenon.

There are two main approaches to a research problem:

- Quantitative Research
- Qualitative Research

What are the difference between Qualitative and Quantitative Research?



The banner features a bright orange background. At the top center is a white icon of a flask with three bubbles above it, followed by the word 'EXPLORABLE' in a white, sans-serif font. Below this, the phrase 'Quiz Time!' is written in a white, cursive script. Underneath, there are three white-bordered boxes, each containing a different image and a quiz title. The first box shows a pair of red roller skates on a wooden deck, with the text 'Quiz: Psychology 101 Part 2'. The second box shows a fan of colorful pens, also with the text 'Quiz: Psychology 101 Part 2'. The third box shows a Ferris wheel against a sunset sky, with the text 'Quiz: Flags in Europe'. In the bottom right corner of the banner, the text 'See all quizzes =>' is written in white.

## Different Research Methods

There are various [designs](#) [1] which are used in research, all with specific advantages and disadvantages. Which one the scientist uses, depends on the [aims](#) [2] of the study and the nature of the phenomenon:

### Descriptive Designs

Aim: Observe and Describe

- [Descriptive Research](#) [3]
- [Case Study](#) [4]
- [Naturalistic Observation](#) [5]

- [Survey](#) [6], also see our [Survey Guide](#) [7]

## **Correlational Studies**

Aim: Predict

- [Case Control Study](#) [8]
- [Observational Study](#) [9]
- [Cohort Study](#) [10]
- [Longitudinal Study](#) [11]
- [Cross Sectional Study](#) [12]
- [Correlational Studies in general](#) [13]

## **Semi-Experimental Designs**

Aim: Determine Causes

- [Field Experiment](#) [14]
- [Quasi-Experimental Design](#) [15]
- [Twin Studies](#) [16]

## **Experimental Designs**

Aim: Determine Causes

- [True Experimental Design](#) [17]
- [Double-Blind Experiment](#) [18]

## **Reviewing Other Research**

Aim: Explain

- [Literature Review](#) [19]
- [Meta-analysis](#) [20]
- [Systematic Reviews](#) [21]

## **Test Study Before Conducting a Full-Scale Study**

Aim: Does the Design Work?

- [Pilot Study](#) [22]

## **Typical Experimental Designs**

### **Simple Experimental Techniques**

- [Pretest-Posttest Design](#) [23]
- [Control Group](#) [24]
- [Randomization](#) [25]
- [Randomized Controlled Trials](#) [26]
- [Between Subjects Design](#) [27]
- [Within Subject Design](#) [28]

## Complex Experimental Designs

- [Factorial Design](#) [29]
- [Solomon Four-Group Design](#) [30]
- [Repeated Measures Design](#) [31]
- [Counterbalanced Measures Design](#) [32]
- [Matched Subjects Design](#) [33]
- [Bayesian Probability](#) [34]

## Which Method to Choose?

What design you choose depends on different factors.

- What information do you want? The [aims](#) [2] of the study.
- The nature of the phenomenon - Is it feasible to collect the data, and if so, would it be [valid/reliable](#) [35]?
- How [reliable](#) [36] should the information be?
- Is it [ethical](#) [37] to conduct the study?
- The cost of the design
- Is there little or much current scientific theory and literature on the topic?

## Survey Guide

The full guide - [How to create a Survey / Questionnaire](#) [7]

### Introduction

- [Research and Surveys](#) [38]
- [Advantages and Disadvantages of Surveys](#) [39]
- [Survey Design](#) [40]
- [Methods of Survey Sampling](#) [41]

### Planning a Survey

- [Planning a Survey](#) [42]
- [Defining Survey Goals](#) [43]

### Questions and Answers

- [Constructing Survey Questions](#) [44]
- [Questionnaire Layout](#) [45]
- [Types of Survey Questions](#) [46]
- [Survey Response Scales](#) [47]
- [Survey Response Formats](#) [48]

### Types of Surveys

- [Selecting the Survey Method](#) [49]
- [Types of Survey](#) [50]

- Paper-and-pencil Survey
- [Personal Interview Survey](#) [51]
- [Telephone Survey](#) [52]
- [Online Surveys](#) [53]
- [Preparing an Online Survey](#) [54]
- [Web Survey Tools](#) [55]
- [Focus Groups - Pros and Cons](#) [56]
- [Panel Study](#) [57]

## Conducting the Survey

- [Pilot Survey](#) [58]
- [How to Conduct a Survey](#) [59]
- [Increasing Survey Response Rates](#) [60]

## After the Survey

- [Analysis and Handling Survey Data](#) [61]
- [Conclusion of a Survey](#) [62]
- [Presenting Survey Results](#) [63]

## Resources

- [Questionnaire Example](#) [64]
- [Questionnaire Checklist](#) [65]

## Further Reading

- ["Research Design: Qualitative, Quantitative, and Mixed Methods Approaches"](#) [66] by John W. Creswell
- ["Essentials of Research Design and Methodology"](#) [67] by Geoffrey R Marczyk

---

**Source URL:** <https://verify.explorables.com/research-designs>

### Links

- [1] <https://verify.explorables.com/different-research-methods>
- [2] <https://verify.explorables.com/aims-of-research>
- [3] <https://verify.explorables.com/descriptive-research-design>
- [4] <https://verify.explorables.com/case-study-research-design>
- [5] <https://verify.explorables.com/naturalistic-observation>
- [6] <https://verify.explorables.com/survey-research-design>
- [7] <https://verify.explorables.com/surveys-and-questionnaires>
- [8] <https://verify.explorables.com/case-control-study>
- [9] <https://verify.explorables.com/observational-study>
- [10] <https://verify.explorables.com/cohort-study>
- [11] <https://verify.explorables.com/longitudinal-study>
- [12] <https://verify.explorables.com/cross-sectional-study>
- [13] <https://verify.explorables.com/correlational-study>
- [14] <https://verify.explorables.com/field-experiments>
- [15] <https://verify.explorables.com/quasi-experimental-design>
- [16] <https://verify.explorables.com/identical-twins-study>
- [17] <https://verify.explorables.com/true-experimental-design>

- [18] <https://verify.explorable.com/double-blind-experiment>
- [19] <https://verify.explorable.com/what-is-a-literature-review>
- [20] <https://verify.explorable.com/meta-analysis>
- [21] <https://verify.explorable.com/systematic-reviews>
- [22] <https://verify.explorable.com/pilot-study>
- [23] <https://verify.explorable.com/pretest-posttest-designs>
- [24] <https://verify.explorable.com/scientific-control-group>
- [25] <https://verify.explorable.com/randomization>
- [26] <https://verify.explorable.com/randomized-controlled-trials>
- [27] <https://verify.explorable.com/between-subjects-design>
- [28] <https://verify.explorable.com/within-subject-design>
- [29] <https://verify.explorable.com/factorial-design>
- [30] <https://verify.explorable.com/solomon-four-group-design>
- [31] <https://verify.explorable.com/repeated-measures-design>
- [32] <https://verify.explorable.com/counterbalanced-measures-design>
- [33] <https://verify.explorable.com/matched-subjects-design>
- [34] <https://verify.explorable.com/bayesian-probability>
- [35] <https://verify.explorable.com/validity-and-reliability>
- [36] <https://verify.explorable.com/definition-of-reliability>
- [37] <https://verify.explorable.com/ethics-in-research>
- [38] <https://verify.explorable.com/research-and-surveys>
- [39] <https://verify.explorable.com/advantages-and-disadvantages-of-surveys>
- [40] <https://verify.explorable.com/survey-design>
- [41] <https://verify.explorable.com/methods-of-survey-sampling>
- [42] <https://verify.explorable.com/planning-a-survey>
- [43] <https://verify.explorable.com/defining-survey-goals>
- [44] <https://verify.explorable.com/constructing-survey-questions>
- [45] <https://verify.explorable.com/questionnaire-layout>
- [46] <https://verify.explorable.com/types-of-survey-questions>
- [47] <https://verify.explorable.com/survey-response-scales>
- [48] <https://verify.explorable.com/survey-response-formats>
- [49] <https://verify.explorable.com/selecting-the-survey-method>
- [50] <https://verify.explorable.com/types-of-survey>
- [51] <https://verify.explorable.com/personal-interview-survey>
- [52] <https://verify.explorable.com/telephone-survey>
- [53] <https://verify.explorable.com/online-surveys>
- [54] <https://verify.explorable.com/preparing-an-online-survey>
- [55] <https://verify.explorable.com/web-survey-tools>
- [56] <https://verify.explorable.com/focus-groups>
- [57] <https://verify.explorable.com/panel-study>
- [58] <https://verify.explorable.com/pilot-survey>
- [59] <https://verify.explorable.com/how-to-conduct-a-survey>
- [60] <https://verify.explorable.com/increasing-survey-response-rates>
- [61] <https://verify.explorable.com/handling-survey-data>
- [62] <https://verify.explorable.com/conclusion-of-a-survey>
- [63] <https://verify.explorable.com/presenting-survey-results>
- [64] <https://verify.explorable.com/questionnaire-example>
- [65] <https://verify.explorable.com/questionnaire-checklist>
- [66] [http://www.amazon.com/gp/product/1412965578/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=experiresour-20&linkCode=as2&camp=217145&creative=399353&creativeASIN=1412965578](http://www.amazon.com/gp/product/1412965578/ref=as_li_tf_tl?ie=UTF8&tag=experiresour-20&linkCode=as2&camp=217145&creative=399353&creativeASIN=1412965578)
- [67] [http://www.amazon.com/gp/product/0471470538/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=experiresour-](http://www.amazon.com/gp/product/0471470538/ref=as_li_tf_tl?ie=UTF8&tag=experiresour-)

20&linkCode=as2&camp=217145&creative=399353&creativeASIN=0471470538