

Research Methods

Research methods can be defined as “a systematic and scientific procedure of data collection, compilation, analysis, interpretation, and implication pertaining to any problem”. Types of research methods can be classified into several categories according to the nature and purpose of the study and other attributes.

General Classification of Types of Research Methods

Types of research methods can be broadly divided into two quantitative and qualitative categories.

Quantitative research “describes, infers, and resolves problems using numbers. Emphasis is placed on the collection of numerical data, the summary of those data and the drawing of inferences from the data”.

Qualitative research, on the other hand, is based on words, feelings, emotions, sounds and other non-numerical and unquantifiable elements. It has been noted that “information is considered qualitative in nature if it cannot be analysed by means of mathematical techniques. This characteristic may also mean that an incident does not take place often enough to allow reliable data to be collected”.

Types of Research Methods According to Nature of the Study

Types of the research methods according to the nature of research can be divided into two groups: descriptive and analytical.

Descriptive research usually involves surveys and studies that aim to identify the facts. In other words, descriptive research mainly deals with the “description of the state of affairs as it is at present”, and there is no control over variables in descriptive research.

Analytical research, on the other hand, is fundamentally different in a way that “the researcher has to use facts or information already available and analyse these in order to make a critical evaluation of the material”.

Types of Research Methods According to the Purpose of the Study

According to the purpose of the study, types of research methods can be divided into two categories: applied research and fundamental research. Applied research is also referred to as an action research, and the fundamental research is sometimes called basic or pure research. The table below summarizes the main differences between applied research and fundamental research. Similarities between applied and fundamental (basic) research relate to the adoption of a systematic and scientific procedure to conduct the study.

<u>Applied Research</u>	<u>Fundamental Research</u>
§ Tries to eliminate the theory by adding to the basics of a discipline	§ Aims to solve a problem by adding to the field of application of a discipline
§ Problems are analysed from the point of one discipline	§ Often several disciplines work together for solving the problem
§ Generalizations are preferred	§ Often researches individual cases without the aim to generalize
§ Forecasting approach is implemented	§ Aims to say how things can be changed
§ Assumes that other variables do not change	§ Acknowledges that other variables are constant by changing
§ Reports are compiled in a language of technical language of discipline	§ Reports are compiled in a common language

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