

I'm not a bot



Similarities and differences between qualitative and quantitative research methods ppt

Research methods in education can be broadly categorized into two types: Quantitative and Qualitative. **1. Types of Educational Research** There are two primary approaches: - **Quantitative Research**: In this type, the researcher decides what to study. - **Qualitative Research**: Here, the researcher relies on the views of the participants. Survey Designs involve administering instruments to collect data on group characteristics. Grounded theory develops from data without preconceived notions, focusing on individual cases. Interviews and constant comparison are used to build theories from datasets. Ethnographic designs study human cultures through observation, interviews, and description. They often relate to social constructivism, exploring how people understand their world and accomplish tasks. Narrative Research Designs use stories to describe individuals' experiences and lives. Mixed Method Studies combine quantitative and qualitative methods to collect and analyze data, depending on the research question. Action Design is disciplined inquiry into practices to inform and change them. It often involves collaborative activities among colleagues and focuses on specific issues in classrooms or programs. Choosing a research type depends on matching the approach to the research problem, audience, and experience. Qualitative Research provides information beyond basic demographic data, exploring underlying reasons and motivations. Quantitative Research measures opinions in structured ways to produce statistics for decision-making. Key differences between qualitative and quantitative research include: * Qualitative Research aims to understand underlying reasons and motivations, while Quantitative Research focuses on measuring the incidence of views and opinions. * Qualitative Research seeks insights into problem settings, generating ideas, and understanding contexts. Quantitative Research Used for Data Analysis, While Qualitative Research Focused on Gaining Insights. For Future Studies: Qualitative & Quantitative Research Methods 15. Quantitative Research Definition •Quantitative research uses natural sciences' methods to produce numerical data and facts. It establishes cause-effect relationships between variables using math, computing, and statistics. This type of research is also empirical, as it can be precisely measured. • Data collected by the researcher can be categorized, ranked, or measured in units. Graphs and tables are constructed from raw data, making analysis easier. 16. Qualitative-Quantitative Research Differences •The differences between qualitative and quantitative research lie in: • Qualitative research explores human and social sciences to understand people's thoughts and feelings. Quantitative research generates numerical data using statistical, logical, and mathematical techniques. • Qualitative research is holistic, while quantitative research is particularistic. • Qualitative research follows a subjective approach, as the researcher is involved, whereas quantitative research is objective, attempting to precise observations. 17. Research Types •Qualitative research is exploratory and inductive, with purposive sampling for a thorough understanding of the target concept. Quantitative research is conclusive and deductive, relying on random sampling for extrapolation. • Verbal data are collected in qualitative research, while measurable data is gathered in quantitative research. 18. Analysis Methods •Qualitative research uses process-oriented inquiry, generating hypotheses through inductive reasoning. Quantitative research tests hypotheses using deductive reasoning, analyzing numerical data. • Qualitative research explores ongoing processes and develops ideas. Quantitative research examines cause-effect relationships between variables. • Qualitative research methods include in-depth interviews and focus groups, while quantitative research methods involve structured interviews and observations. Qualitative and quantitative research have different approaches and applications. A good study combines both methods to provide a comprehensive understanding. Although some areas may only need one type of research depending on the information needed, ideally both qualitative and quantitative research should be used together. Qualitative research focuses on interpretation, whereas quantitative research provides concrete results.