

# ANALYSING QUANTITATIVE RESEARCH

Analysing quantitative data involves organizing and interpreting often large datasets. Quantitative analysis seeks to understand and explain connections. For example, it may seek to explain the relationship between a new initiative and student achievement.

Even when data have been collected using well-defined procedures and standardized tools, they need to be checked for any inaccurate or missing data. Data cleaning involves finding and dealing with any errors that occur during writing, reading, storage, transmission, or processing of computerized data.

## Key considerations when analysing quantitative data

1. **Own your data!** Consider the source, description, research questions, research needs etc. to help inform your analysis.
2. **Clean and organize** the data for analysis. Coding and the nature of the data should have been determined before collecting the data. Check the data for errors.
3. **Code** and input the data in analysis software **and transform the data** (e.g., collapse data into categories, handle missing values)
4. **Keep track** of your data and your decisions as you code in case you need to refer back or are asked to explain your actions. This can be done in a simple document file or notebook.
5. Explore any **differences and relationships** within the data.
6. Focus on strategies to help you **clarify your analysis:** a top 10 list, a graphic organizer, devising headings and subheadings.



## For further information, consider the following:

Ellen Taylor-Powell, Analyzing Quantitative Data,  
<http://learningstore.uwex.edu/assets/pdfs/g3658-6.pdf>

William M. Bannon, Jr., The 7 Steps of Data Analysis: A Manual for Conducting a Quantitative Research Study, <http://www.statswhisperer.com/wp-content/uploads/2012/10/Intro-The-7-Steps-of-Data-Analysis-WM-Bannon.pdf>

Quantitative Data Analysis Techniques for Data-Driven Marketing,  
<http://www.iacquire.com/blog/quantitative-data-analysis-techniques-for-data-driven-marketing-2>