



Research: Understanding the Dichotomy of Quantitative and Qualitative¹

Ted Ward

1. Christian education benefits from social science:

- a) Enlarging repertoire of research modes.
- b) Moving religious research beyond the constraints of books, and finger-counting, and perpetual guesswork.
- c) Utilizing up-to date models of inquiry procedure.
- d) Alignment of research with the methodological practices in scientific inquiry,
- e) Providing worthy tools for the Christian quest for truth.

2. Societal shifts and the popularity of qualitative research.

- a) Societal shift: General awareness of the importance of science has increased.
- b) Expansion of PhD studies in education has increased necessity of research competency.
- c) Antipathy and incompetence in mathematics has motivated interest in alternatives to statistical procedures.

3. Common misunderstandings in academic research:

- a) “If it doesn’t use statistical methods, a study isn’t really research.”
- b) “The research is successful if the hypothesis can be proven—or turns out to be true.” (“If not, start over.”)
- c) “If the hypothesis isn’t true the research was faulty.”
- d) “When a dissertation or thesis doesn’t turn out right, it must be repeated.”
- e) “Statistical studies are more difficult and generally take longer.”
- f) “Statistical studies are more scientific.”
- g) “Quantitative research isn’t really research.”
- h) “Interest in qualitative research is only a fad.”
- i) “It is much easier to do a qualitative research.”
- j) “Thorough research is done in a good library.”
- k) “Isn’t *hypothesis* just another name for a “hunch”?”

4. The Sequence of Research Modes

Observing actions and contexts. Here is where research begins, often in the practitioner’s awareness of progress or lack of progress of clients or students.

¹ Ted Ward. Research: Understanding the Dichotomy of Quantitative/Qualitative Research. Workshop, North American Professors of Christian Education (NAPCE—now SPCE), Seattle, 2011

Forming a question (or family of questions) that seems important to understanding what occurs in the observed situation.

Reading precedents in literature. books, journals, research reports

A qualified researcher knows better than to undertake the quantitative analysis of experimental data which have inadequate grounding in thorough qualitative study.

Thorough research demands a sequence of orderly inquiries.

- a) Three general categories of research are ultimately required to represent the findings of a research to the scientific community.
- b) A thorough research paper will provide outcomes from all three of the categories.
- c) Doctoral dissertations typically emphasize only one or two of the categories.

I. *Qualitative (descriptive) inquiries:* observation, interviewing, building taxonomic frameworks, studying the established literature in relation to the context and its evident components.

Outcome: Relevant Hypotheses

II. *Hypothesis-refinement.* Descriptive statistics on the prevalence and characteristics of the components of the situation must be developed (The particular value of this stage is the preparation and pre-testing of instrumentation as needed for experimental testing of the emergent hypotheses.)

Outcome: Testable Hypotheses

III. *Experimentation.* An evident relationship or a possible contingency that is indicated by the hypothesis (hypotheses) must be put to test in an experimental design and statistically examined in order to build theory.

Outcome: Tested Hypotheses/Theory

5. Earmarks of sound research:

- a) Minimal use of the word “prove.”
- b) Avoidance of overuse of difficult and incomprehensible statements. (The purpose of a research paper is to *inform*, much less to *persuade*.)
- c) The hypothesis (or hypotheses) are logically grounded in the rationale established by the qualitative research.
- d) The experimental conditions are not biased toward the hypotheses; instead they show an even-handed and “fair” representation of the relationship of outcomes to the original research questions.