

Common Errors in Research

Planning Research Papers 8

Questionnaire Studies

1. Using a questionnaire to work with problems that lend themselves better to other research techniques.
2. Not giving enough care to the development of the questionnaire and not pretesting it.
3. Asking too many questions, thus making unreasonable demands on the respondents' time.
4. Overlooking details of format, grammar, printing, and so on that can influence respondents' first impression.
5. Not checking a sample of non-responding subjects for possible bias in the questionnaire.

Interview Studies

1. Not adequately planning the interview or developing the interview guide.
2. Not conducting sufficient practice interviews to acquire needed skills.
3. Failing to establish safeguards against interviewer bias.
4. Not making provisions for calculating the reliability of the interview data.
5. Using language in the interview that the respondents won't understand.
6. Asking for information that the respondents cannot be expected to have.

Experimental Studies

1. Inadvertently or otherwise treating the experimental and control groups differently, thus leading to biased findings.
2. Using too few cases, leading to large sampling errors and insignificant results.
3. Failing to divide the main groups into subgroups in situations where subgroup analysis may produce worthwhile knowledge.
4. Matching the subjects in the experimental and control groups on criteria that have little to do with the variables being studied.
5. Attempting to match control and experimental groups on so many criteria that in the process you lose a large number of subjects who cannot be matched.

These kinds of studies involve finding the patterns within some body of material (e.g., texts, transcripts of conversations, videotapes of classroom interactions, and so on).

Content Analysis Studies

1. Selecting content that is easily available but is not an unbiased sample.
2. Selecting some content that is not really related to the research objectives.
3. Failing to determine the reliability of the content-analysis procedures.
4. Using classification categories that are not specific yet comprehensive.

Observational Studies

1. Not sufficiently training observers and thus obtaining unreliable data.
2. Using an observation procedure that demands too much of the observer.
3. Failing to safeguard against the observer's disturbing or changing the situation being observed.
4. Attempting to evaluate behavior that occurs so infrequently that reliable data cannot be obtained through observations.

Relationship (Correlation) Studies

1. Assuming that a correlation between pieces of data is proof of a cause-and-effect relationship.
2. Using a sample in correlational research that differs on so many variables that comparisons of groups are not interpretable.
3. Putting the cart before the horse: trying to build a correlational study around conveniently available data instead of collecting the data needed to do a worthwhile study.
4. Selecting variables for correlation that have been found unproductive in previous studies.
5. Failing to use appropriate disciplinary theory in selecting variables to study.
6. Using simple correlation techniques in studies where partial correlation or multiple correlation is needed to obtain a clear picture of the way the variables are operating.
7. Failing to develop satisfactory measures to use in correlation studies of complex skills or behavior patterns.

Here are a couple of sources you might find helpful if you want more information. Day's book is more in-depth and geared toward writers of professional papers. Meriwether's is more basic and how-to, and is aimed more toward writers of college-level research papers.

Day, R.A. (1979). *How to write and publish a scientific paper*. Philadelphia: ISI Press.

Meriwether, N. (2001). *12 easy steps to successful research papers* (second ed.). Lincolnwood IL: National Textbook Co.