UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
BOOKSTACKS

Digitized by the Internet Archive
in 2011 with funding from
University of Illinois Urbana-Champaign

http://www.archive.org/details/hownottodoresear418webb

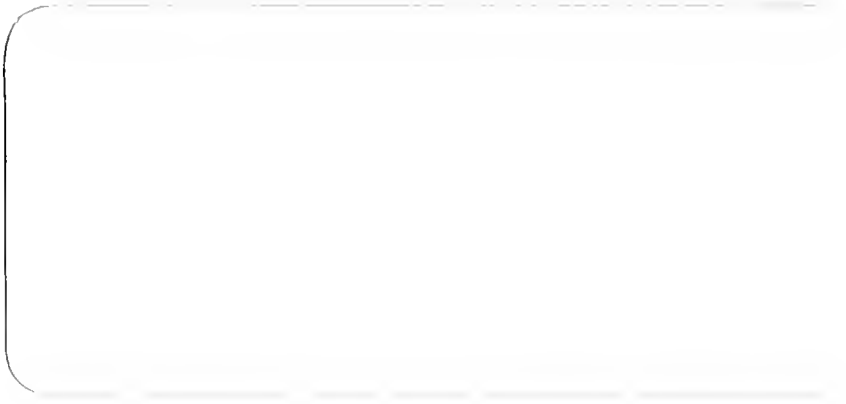
Faculty Working Papers

# HOW NOT TO DO RESEARCH: REVISITED

Peter H. Webb

#418

College of Commerce and Business Administration
University of Illinois at Urbana-Champaign



FACULTY WORKING PAPERS

College of Commerce and Business Administration

University of Illinois at Urbana-Champaign

July 8, 1977

# HOW NOT TO DO RESEARCH: REVISITED

Peter H. Webb

#418

An editorial in Journal of Marketing Research ten years ago warned us of the pitfalls of incorrect research procedures. That editorial is updated, with special emphasis on research conducted in the laboratory.

It has been ten years since Bob Ferber told us "How Not to Do Research" (1). As Ferber put it:

> How-to publications are popular today, especially with the reputed publication of 'Brain Surgery Self-Taught.' Though it isn't likely that anything as sophisticated will happen in marketing research, marketing researchers should try to prepare material of equal value for their profession. Any marketing researcher, no matter what his experience or sophistication, with little effort can get himself relieved of arduous research.

In the ten year interim, we have again been besieged with how-to publications. It is time for a refresher course.

My own research to date has been concentrated in the laboratory, so there I will focus. I feel particularly qualified in relating how not to do research in the laboratory, not because I have more experience in the lab than others, but because I have more experience doing the wrong thing in the lab than others.

The following list of ten rules includes the more important aspects of how not to conduct lab research. It is not intended to be exhaustive. Nor is it presented so that others might profit from my mistakes. Indeed, in this dog-eat-dog profession of ours, I encourage those researchers nipping at the heels of my academic security to find out for themselves the consequences of following in my footsteps. And if along the path, additional ways are discovered not to do research, please submit them to the author who will file them for the next update in 1988:

1. Never base lab studies on theory. Remember that theories can never be proved, only disproved. So why take a chance? If your religious convictions compel you to make hypotheses, at least have the good sense to make them after you conduct the study rather than before.

You will then have the aid of a hundred or more regressions, anovas, and crosstabs of which at least five percent will surely be significant.

2. Always aim for at least four independent variables with three or more levels of each. Do not worry about replications--empty cells are rarely a problem. Besides, main effects are no longer of interest and most one and two way interactions have already been established. Only three and four way interactions remain as palatable food for the serious researcher.

3. Do not use multiple measures. Why burden your study with redundancy? What would Copernicus say about multi-trait, multi-method as a philosophy of science? Surely that it violates the law of parsimony. It is time to put uni-trait, uni-method back into the lab. What's true measured one way is true measured another. If you've seen one measure, you've seen them all... This would also eliminate the need for any sophisticated analysis. Simply follow the four C's: Collect it. Code it. Cross-tab it. Communicate it.

4. Continue to use college sophomores as subjects for all studies. They are available, cheap, and well-healed. Having been in the lab many times before, instructions are rarely necessary. They know what behaviors are expected of them and will cause you no trouble. You need not disguise the true purpose of the experiment--they will know it anyway--even if you don't. Demand characteristics exist only in the chapters of textbooks and the lectures of professors seeking ways to fill their courses with anything but substance. Besides, external validity is no longer in vogue.

You will then have the aid of a hundred or more regressions, anovas, and crosstabs of which at least five percent will surely be significant.

2. Always aim for at least four independent variables with three or more levels of each. Do not worry about replications--empty cells are rarely a problem. Besides, main effects are no longer of interest and most one and two way interactions have already been established. Only three and four way interactions remain as palatable food for the serious researcher.

3. Do not use multiple measures. Why burden your study with redundancy? What would Copernicus say about multi-trait, multi-method as a philosophy of science? Surely that it violates the law of parsimony. It is time to put uni-trait, uni-method back into the lab. What's true measured one way is true measured another. If you've seen one measure, you've seen them all... This would also eliminate the need for any sophisticated analysis. Simply follow the four C's: Collect it. Code it. Cross-tab it. Communicate it.

4. Continue to use college sophomores as subjects for all studies. They are available, cheap, and well-healed. Having been in the lab many times before, instructions are rarely necessary. They know what behaviors are expected of them and will cause you no trouble. You need not disguise the true purpose of the experiment--they will know it anyway--even if you don't. Demand characteristics exist only in the chapters of textbooks and the lectures of professors seeking ways to fill their courses with anything but substance. Besides, external validity is no longer in vogue.

5. Be sure that experimenters are fully aware of expected outcomes and have a vested interest in the success of the experiment. This might be achieved by compensating them on a commission basis (e.g., so much per successful session) or offering co-authorship status in the resulting publication if the experiment works.

6. Pre-test minimally, if at all, and only because your now-ancient dissertation advisor showed you his stone tablet with the inscription "Thou shalt pre-test" when he agreed to take you on as his disciple. What can possibly go wrong that you haven't already thought of? If you feel you must pre-test, use only friends, relatives, or colleagues so you don't have to pay them. Simply tell them to act like your criterion population. Better yet, tell them to act like college sophomores. And don't forget to include pre-test results as part of the final analysis--an excellent way to increase sample size.

7. Make sure that your post-test questionnaire is comprehensive. As long as you have a captive audience, why not make the most of it? Begin by writing down in the form of a question, every item that could conceivably relate to your experiment. Include all these items on the final questionnaire. Be sure not to restrict yourself to items you know how to analyze. Such items make superb covariates. Now make up another set of items that relate to any other research you are also engaged in. Finally, solicit additional items from friends or colleagues who are in need of data--they will feel obliged to do the same for you some day.

8. Throw out bad data as you go along. You are in the lab because of its unique capacity to permit strict control, so be sure to take advantage of that capacity. If something unusual or unanticipated

occurs, it is surely outside the boundaries you have established for the conduct of the study. Simply discard it and run an extra session. If you don't, somebody else will explain the results that you couldn't. Why subject yourself to such embarrassment?

9. Don't bother to debrief your subjects. This is simply a waste of time and might even result in bringing abuse upon yourself when subjects find they have been deceived once again. If you don't debrief, who will ever know? Certainly not the Committee on Human Subjects to whom you swore you would.

10. Finally, never design a study which is complete in and of itself. As academics, pledged to combat anything bordering on closure, we live in constant fear of one day reading the journal article that concludes, "Further research in this area will not be necessary."

*Peter H. Webb is Assistant Professor of Business Administration at the University of Illinois. Preparation of this article was aided by the grimaces and guffaws of Professor Vithala Rao, whom the author wishes to thank for his assistance.

1. Ferber, Robert. "How Not to Do Research," Journal of Marketing Research, 5 (February, 1968), 104.

UNIVERSITY OF ILLINOIS-URBANA
3 0112 060296511