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Is action research too risky?

Bob Dick (1994) Action research: is it too risky for theses? Address to Social Psychology Study Group, School of Behavioural Science, Griffith University, May. This is a transcript of an unscripted talk.

To do experimental or quasi-experimental research in an applied job is doubling your job. Research is an extra job added on top of whatever you are doing. So I initially did what most practitioners do — just ignored research and did my work without it.

This seemed to be most unsatisfactory. I was on the lookout for methods that were flexible enough and responsive enough to be built into the job. I wanted them to be rigorous enough to yield some assurance about the findings. It turns out that action research is designed to handle that situation.

What I will be doing today is addressing two questions:

> Can practitioners use their work as a vehicle for a thesis?
>
> Can thesis candidates do field research which isn't trivialised?

What I will be saying is, first, that it is possible to achieve both flexibility and rigour at the same time. It doesn't have to be an enormous load on top of what

you are already doing. It seems to me that the report that people get on their thesis is to some extent about how well they have written it up. People are very creative about telling lies — it is usually possible to make a poor study look good on paper. Unfortunately it is also easy to make a good study look really poor. I think that is what a lot of people finish up with. So I also want to talk about what an action research thesis might look like.

The second point comes out of a paper that Chad Perry wrote some while ago. Chad was supervising action research theses at QUT. Because of the risks, what he encourages people to do is to make the thesis look as close to a traditional thesis as they can. I can understand his reasons for doing that. It reduces the risk. I know many people have found it helpful.

I also think his paper sells action research short. By making it appear what it isn't, it actually disguises some of its best features. I prefer an approach which does justice to action research.

What is action research?

For those of you who are relative novices, "What is action research?" For this audience it may be easiest to contrast it to experimental and quasi-experimental research.

Experimental research is most easily and effectively done when you have a precise research question. The more precise the research question is, the easier it is to design a program of study and data analysis to answer that question.

My practice is consultancy. Those of you who do consultancy know that wherever you start turns out to be the wrong place. The buzz that I get out of consultancy is precisely because that. There is a constant threat that my next step will take me out of my depth. It's pointless to say that I can start with a precise research question. I can't.

Let me illustrate. Some colleagues and I have recently completed an evaluation at the campus here at Griffith. I can talk about it because it is going to be made public. We helped to evaluate the "Offices" program in the law school. We used interviewing as our major data collection method. We conducted each interview like this ...

After introducing ourselves and telling people about what the guarantees were, we asked them, "Tell me about offices?" We kept them talking for about 45 minutes without asking any further questions.

This was our way of guaranteeing that the data we were given was not determined by our questions but came from the respondents. That is quite an open-ended approach. If you were trying to solve a precise question, it wouldn't be the way to go about it.

So somehow we need a methodology that will start with really fuzzy, open-ended questions. Because the initial question is fuzzy, the methods for collecting the data have to be quite general — capable of handling just about anything that may arise. So you could refer to those as fuzzy methods.

I was explaining this to some postgraduates at the Southern Cross University (before it became Southern Cross University). In the audience was a conventional researcher, a biologist. He came along because he had heard about action research but didn't know much about it. When I talked about fuzzy questions and fuzzy methods he stood up and he smiled broadly. He said, "Ahah. If you try to answer fuzzy questions with fuzzy methods, the best you can hope for is fuzzy answers."

And he was right, absolutely. The point is, though, that action research is a cyclical process. This means that you can then use those fuzzy answers to ask less fuzzy questions on a second run. You can be a bit more precise about the questions you ask or the methods you use to collect the data. So the answer too is less fuzzy on the second run.

You can build in sufficient cycles. You can be sceptical and seek out disconfirming evidence as you go. This can give you definitive answers from fuzzy questions. There are lots more sophisticated ways of describing action research but I think that sufficiently captures the heart of it.

I have been trying to read the some philosophy of science lately. I can understand why many people don't. Every so often I come across a philosopher who writes in simple English. But it's a rare occurrence. Denis Philips is an exception. He has written a number of recent books on the philosophy of science.

He quotes John Dewey, the educationalist who wrote late last century and to some extent the beginnings of this century. Dewey anticipated much current philosophy of science. He said that you can never be sure that your findings really tell you anything. The most people hope for is, in his words, " to have a warrant for your assertion".

You can aim your research towards producing a warrantable assertion. You are trying to find out the truth. Because no-one quite knows what the truth is, you don't know when you get there. So the point is to be able to make a sufficient case for the assertions you make, a warrantable assertion. A thesis is a document which builds an adequate case, a warrantable assertion, about its conclusions.

Paul Ledington (a soft-systems methodologist) and I are supervising an action research thesis on the learning organisation. Selena, the researcher, asked us, "What is a thesis?" Paul said, "It is a large piece of work with one original sentence in it somewhere." I thought that is a great way of thinking about it. It would be good if it had more than one new sentence. But one new sentence is all it really needs — the rest of the thesis is actually there to justify the one sentence.

How do you make a warrantable assertion?

So how do you go about making a warrantable assertion? At the end of the study you'll know what the new sentence is — how are you going to fill a whole bloody thesis? The warrantable assertion is going to be drawn from your interpretation of your data and so somehow or other the interpretation has to be solid and the data on which it is based has to be solid. And so the methods that you are using in the field somehow or other have to assure both data and interpretation.

One of the distinguishing characteristics of action research compared with experimental and quasi-experimental paradigms or ethnographic paradigms, is that the data collection and interpretation proceed at the same time. In other words you collect a little bit of data, you interpret it, and then collect a bit more data and then you interpret that. So you are working in cycles, you are refining your methods and your questions and answers as you go. The building in of both data collection and interpretation into each cycle, is part of where the rigour really comes from. It then means that it gives you many opportunities to challenge your findings. So in a sense, one cycle of an action research study is somewhat similar to one experiment when using experimental or quasi-experimental research.

Generalisability

One of the major complaints about action research by experimentalists is that it doesn't give generalisable results. That is not true by the way but it is part true. It is true that it is more difficult to generalise from action research than from much research because generalisability is not what the action researcher is pursuing. What the action researcher is pursuing is relevance to the situation because the thing about action research, as its name implies, is that it is supposed to produce two sets of outcomes. It is supposed to produce change and it is supposed to produce research, understanding, knowledge at the same time.

Experimental and ethnographic research, doesn't have to worry about the action half of it — they just have to ensure the findings. And it is that need for action that means that ethnographic paradigms don't work well and experimental paradigms work only with extreme difficulty.

Now let me be quite clear about this — I am not knocking experimental or ethnographic paradigms. All I am arguing for is the fitness of different paradigms for different situations and different research questions. And what I am saying is — if you are working as a practitioner and you are looking for a research paradigm that allows you to build research easily and effectively into your practice, and in addition you would like to get a thesis out of it, then action research is likely to be an easier choice than either experimental or ethnographic research.

One of the ways in which you can secure more generalisability, if that is important to you, is by doing multiple studies. So instead of doing one case study for instance you could do two. If you have chosen them to be pretty diverse, then those things that you find in both of them, it seems to me, can with some caution be generalisable beyond the two studies.

You will notice the general philosophy then that action researchers tend to use maximum diversity samples, not random samples. You want maximum payoff from the time that you put into data collection because you don't get any credit for the enormous amount of legwork that you put into field studies. I understand why people do theses in a laboratory. I did it myself.

Drawing on the literature

One of the things that really gets nasty comments from experimental researchers about action research is that there is no point doing a literature review at the front end of your study. You don't know what literature will turn out to be relevant. That depends on where the study leads you. So once again the demands of being responsive to the situation, means that it is pointless trying to

read all the relevant literature. It might be everything in the library and I don't know that any of you have the time to do that. Most people of my acquaintance certainly do not. In fact it seems to me that the most demanding part of action research, is the literature review because it means that you really have to have good archiving skills to be able to identify which literature is relevant. You will notice that what this also means that even if you start out researching what you think is psychology, where you finish up is likely to be psychology and 5 million other things as well. You will likely sample a far wider literature. Compared to that, researching a limited literature ahead of time may appear to you something of a luxury.

What do you want to be able to say at the end of the thesis, in terms of justifying your one new sentence? "This interpretation emerged early in the thesis. I went out of my way to look for disconfirming data. I went out of my way to find disconfirming interpretations. I went out of my way to find disconfirming literature. I was unable to." Being able to make that kind of assertion is what makes your conclusion warrantable. And so this notion is tight cycles and search for disconfirming evidence through the data, through your interpretations and the literature as you go. So each cycle looks like that. So far I am concentrating on the big picture rather than specific methods.

How do you write up action research?

Most of the action research theses I have examined, are written chronologically. First I did this, then I did this, I did this ..... If you are impressed by size it gives you very large theses. It also gives you very boring and repetitious theses. I don't believe that is the way to go.

Conventional wisdom is that a thesis is organised around a research question. If you have a precise research question, that makes a lot of sense. You could just as easily say, though, that a conventional thesis is written around the conclusion. It is the single thread of argument that goes all the way from the research question

to the end. So why not organise an action research thesis around the conclusion? I think you can make a case for that as, in a sense, the functional equivalent.

In action research the starting question is too fuzzy to act as an organising principle for the research. Organising around the conclusion is likely to give a much neater, much less repetitious, much shorter and, I suspect, a much easier to write thesis.

Structure of an action research thesis

Leaving a few things out, here is a thumbnail sketch of what a thesis might look like in overall structure. There will be an introduction. It won't be the conventional literature review — you don't know what literature is relevant at the start of the study. It is likely to justify the choice of the client and company. Sometimes you don't even start with a research question at all. Sometimes you start with a client. You begin to work with that client to start to find out what is desirable from the client's point of view.

Then you have to justify the paradigm, action research, and the methodology whatever it happens to be. It might be Chris Argyris' action science or it might be the Deakin University model or be some of the evaluation models or Peter Checkland's soft systems methodology. These are more or less step by step methodologies that fit roughly within the action research framework.

Then there is the actual data collection and interpretation methods used: interviewing or focus groups or surveys. There is nothing that says it has to be qualitative although it mostly is for responsiveness. If you are using qualitative data, then that goes so much against some people's expectations that unfortunately you have to argue specifically for the use of qualitative data.

One of the unfair things about the world, becomes apparent when you do a study that uses the paradigm case of conventional experimental research. Pick a control group. Randomly allocate to the two groups. Treat the two groups

entirely identically except for the treatment. Use pre and post measures for the dependent variables. (That is a pretty easy way to do research when you think about it.) That is the kind of mental model people have for good research.

There is also a belief that quantification is better than using qualitative data. I agree with that, by the way, all else being equal. But in field settings you have to leave so much out to go quantitative. You have to invest so much effort into developing your metric. Then the problem changes and you are left with a metric that doesn't fit. So it is mostly qualitative. At the present time you have to argue for it if you are using qualitative data.

(That's not true, by the way, if you are using the ethnographic paradigm. In that case you would have to argue for the use of quantitative data if you are using it within the paradigm. I went to a Conference in Copenhagen a few years ago on organisational culture. The people there were mainly European and quantitative was a dirty word. It is amazing how much of what we do is a matter of fashion.)

There is likely to be a methods section which will describe both the methodology and methods that you used and describe it in such a way that it is evident how much rigour is built into what you do. There will be something that looks remotely like a results section which contains the new sentences.

Here's my guess about how it will go from there. Each major conclusion will probably have a chapter to itself. Each chapter will have the argument supporting that assertion. There you will also find the statement that "despite trying to find disconfirming evidence I couldn't ".

There will be some other bits and pieces as well. Among other things there will be a final chapter. Here you might include the minor conclusions (or give them a chapter) and important things about future directions. You will also do the obligatory things like telling people what was wrong with the study and why some things didn't happen and how they have been taken into account in your

conclusions. If it is an on-going study and the thesis is only part of it, then you will probably have to say something about where things are going.