

How to write about research methods

One of the great things about writing about research methods, is that methods are the thing that unites an otherwise divided academic community. As academic researchers, we all have our individual research topics and interests, and the community of other researchers operating in the same field as us is relatively small. Yet the need to design robust research projects, choose appropriate methods, analyse our data and construct appropriate arguments, theories or hypotheses, is a challenge that unites us all.

So whether we're studying the causes of the First World War, rates of illiteracy in adults or children, antimicrobial resistance in hospitals, or the impact of sport on national identity, we need good research methods. So writing about research methods is our one big chance to write to that much wider community of academic researchers around the world. That means many of the things that we write, whether that's a methodological paper or a methodological book, could have a much bigger audience than perhaps many of the other things that we'll write as academics. It also means though, that when we're thinking about our audience, we do need to be aware of this wider community that we're writing for, and we need to find ways of being meaningful when we're writing about our research to a community of readers who may not share our research interests.

Okay, so my focus throughout this video will be on practical writing strategies that you might wish to consider in your own writing. I'm not concerned with issues of research design, methodology, epistemology, things like that - I want to keep it practical and give you some narrative devices that you may or may not wish to use or think about in your own writing. If you want help with issues of methodology, epistemology, research design, I suggest you look at some of the other videos on the NCRM site and look at the wider methodological literature. So as a PhD student, your task before you write anything, before you even plan your methodology chapter, is to first of all visualise your likely examiners. What will they need to know? What won't they know? What will you need to explain to them and justify? This way, you will hopefully find a way of writing the chapter in a way that is not you explaining for yourself, the methodological decisions that you've made, but you explaining, warranting, contextualising and justifying those methods for your examiner audience.

Now, if you are writing a method section in a typical research paper, let's say it's a data-based paper, or an empirical paper, your audience is

obviously quite different to that of a PhD thesis. Obviously you are writing for your peer reviewers, who are the gatekeepers of your research paper, but you're also writing for a wider audience beyond that. That's likely to be interested academics who are active in your field, and also probably PhD students who are doing research in related areas. Again, the task that faces you in writing your methods section, is to visualise what those people want to see, and need to see, from your methods section. The challenge here is, and let's be honest, the method section for many people is not the most interesting part of a typical empirical paper. Your job is not to hang around too much, but to give enough information so that your arguments, your theories, and the things that you say about the research problem more generally, make sense in the context of the methods that you have chosen. Now, we would contrast this with a methodological article. That is to say, an article which is about issues of methods or methodology, rather than about issues to do with a more empirical research problem.

What's critical here when you're visualising your audience, is from forms of methodological writing, and this applies to methods books and chapters too, your audience is much more wide-ranging than it will be for your own research area, and the things that you might write about in that research area. For instance, if you are a criminologist, it's probably a good bet that it's other criminologists reading your empirical research papers. But, if you are a qualitative researcher who happens to be a criminologist, the audience for your methodological article is going to be a whole range of other qualitative researchers, not just in criminology but in related social science areas. You need to understand that as your audience and adjust your writing accordingly.

Typically when we're considering writing a research methods paper, there are a number of different things that you might wish to consider that could become the core of that article. For many people, it's exploring a new application of an existing method. So, for instance, you're using a particular form of online surveys, and you're the first person to apply online surveys to a particular problem, in political science, for instance, or in geography. Or you could develop a new critique of an existing method. You've used critical discourse analysis in this way, and you've understood that it has strengths in this aspect and weaknesses in this direction, and you wish to share that critique with a wider methodological audience. It could be that you wish to refine or engage with methodological theory, that can be the sort of historical theory that exists in the literature, or you may wish to push theory, the way we talk about methods, that little bit further forward. And increasingly, and particularly in fields of using technology in research, we

may wish to unpack a further refinement in method, or a new innovation. For instance, you may be using participatory methods and using mobile phone or cell phone technology to actually add a new dimension to your data gathering and your data storage, for instance. So the point normally is to have something new or unique to say about methods. So crucially, the point is to understand that your audience is much more wide-ranging than it would be for the more empirical forms of writing, that you would normally experience when writing a research paper.

Now I'll come on to the challenges that face authors of research methods books or textbooks, or chapters a little bit later. So to repeat: good research writing, and particularly good methodological writing, is not about you at all; it's about them, the audience. And so your challenge is to take them by the hand and explain to them the decisions that you've made, the methods that you've used, understanding that they were not there while you did your research. This is a core concept.

Many of us, when we're writing, of course, are writing from experience. We are writing in the context of our own memories - of having done the research, of having carried out an interview, for instance, or conducted an experiment. Within that corpus of memory are all kinds of assumptions - 'I don't need to talk about this', 'I don't need to talk about that', because it's obvious - but of course, if your readers weren't there when you were doing your research, it may not be obvious to them. And so it's absolutely critical when you do your final edit of anything you write about methods, that you subject that work to the question of: Would somebody who wasn't there when I did my research understand everything that I did, and all the decisions that I made?

So, having established the kind of existential points that you're not writing for you but writing for others, I now want to look briefly at a number of kinds of principles and strategies that you may wish to consider using in your own writing about methods. The first one, and this is really one of good housekeeping, in terms of research practice generally, is to consider writing about methodology from day one of your research. What this allows us to do, is to keep everything fresh in our mind. Effectively, as we go about managing and undertaking a research project, we are doing a multitude of things each day; we're making a number of different decisions. It's helpful then to capture not only those decisions themselves, but the rationale behind making those decisions, as they go along. If we leave it until the end of a research project, we may well have forgotten why we did this, or why we did that. So in a way, this is a means of keeping a writing diary. The

advantage also, is that if you're prone at all to writer's block, we are effectively doing very low pressure writing from ourselves each day. We're effectively collecting a corpus of writing as we go along.

That's going to be quite a large body of writing, but what it should do, is when we have finished the research project, it will give us a range of materials from which to choose the best bits and then deploy those in our writing. So if you're keeping a research diary, make sure that the field notes are thorough, and that you are reflecting and capturing methodological choices each day. The kinds of things that you need to be keeping a note of are critical research decisions. You were in a qualitative interview, for instance, and you decided in the middle of that interview not to ask questions three, four and six. Why was that? You may forget why that was later on in the process, but straight afterwards it will be quite obvious to you, and quite fresh in your mind, why you are making those decisions in the midst of your interview. As I mentioned earlier, one of the key points that it's really important to keep front of mind, is that your readers weren't there when you did your research. Now, this brings me to another principle and that is: if space allows, it's really important to state the seemingly obvious. And this is particularly important if you are a PhD student.

The next principle I want to share with you when writing about research methods is what I call the idea that no part of methodology writing is an island. Too often, writers about methods are prone to write in very dry and abstract terms, and I don't think this is good practice. What I mean by saying that no methodology writing should be an island, is it's really key, and enormously helpful, to show some of your findings and rich context, and rich data, to illustrate your methodology section. Don't leave all of your data to the more empirical parts of your writing. Equally, that means that in elsewhere in your thesis, or elsewhere in your book, you need to be showing something of the methodological thinking to illustrate how you came up with your findings and how you developed your theories.

Making your methodological writing feel less isolated also involves drawing on some of the methodological literature when you discuss methods. Don't leave that to a separate section, which we might call a literature review. Clearly, methodological writing is mainly about method. But to understand why we did this, or why we did that, needs to be related back to the wider context of your research problem. It may be that you opted to talk to a different community, because the community that you first looked at didn't provide access, or wasn't actually appropriate for the kind of research problem that you wanted to look at. Therefore, a change in method is very

much rooted in the bigger question of the research problem. What that means then, is that you should be supporting your methodological writing with data, quotes, figures and examples drawn from your research experience that illustrate decisions that you've made.

I want to give you an example. Let's imagine in your research project that you're using a survey, and that the first times that you use that survey, you have come up with your list of questions. It may be that as you practice using that survey in structured interviews, that you get a sense that some questions need rewriting, and some questions need to be taken out altogether, and others need to be added. Now, those decisions only make sense through the practice of doing the research itself. Now that means that when you come to write about your methods, and when you come to write about how you changed your survey instruments, it makes much more sense, and it's much richer to do so, by drawing directly from the data that didn't work, or didn't feel right, that you got from that initial survey or structured interview experience. In that way, we are adding rich material and meaningful context to our methodological writing, and it makes it all make much more sense to our readers.

This we might call the principle of showing, as well as telling, which will be familiar to many of you who thought about writing fiction as well as non-fiction. Now this principle of showing, of using real and meaningful examples to demonstrate the methodological decisions that we've made, if we want to think about that in methodological terminology, we would call that the principle of warranting. This means that it's important to support each point that we make with some kind of 'for instance' or 'for example', which acts as a prompt for us to deliver that context, to deliver something of the real meaningful experience that then informs what could otherwise have been a dry and over-abstracted account of why we changed this, and why we did that.

Now, if you're writing a methods book it's important to understand that the task is a little different. Most people reading a research methods book are reading that book in order to understand a new method for themselves. There, the challenge is not so much using our methodological writing to add power, or to justify and to think about warranting the validity and reliability of a hypothesis, or our arguments. Here, it's much more about understanding that writing about method is there to help other people think about using that method for themselves. We're not justifying research decisions that we made, we are articulating a rationale for why other

researchers, or maybe students, might wish to adopt the same methodological strategy. So just as we've established that your readers were not there when you conducted your research, we also know that you, as an author, won't be there when your future readers try to apply your guidance to their research practice. The principle is almost the same.

The next principle of writing about research methods, is to write about your decisions. Already in this video, I've been talking about this need at every stage of the process, and a way of conceptualising the writing task you have, is to see it as an account of the most appropriate and important research decisions that you have made.

In the course of any research project, you've probably made many thousands of decisions, most of which are seemingly unimportant, but many of which, like the decision to use one particular form of data analysis over another, or the decision to use one location for your research over a different location, are absolutely key. Now your challenge here is to understand and try and work out, how many of those decisions reasonably you can write about. In a PhD chapter, for instance, you could have anything between 5,000 words and 12,000 words in that chapter, in order to give your examiner readers a really good idea of the range of good decision-making that you made in the design of your research project. However, in a research paper you may only have a few hundred words, particularly in shorter research papers, to deal with issues of methodology. Clearly if that's the case, you can't talk about the kind of range of decisions that you have to make that you might in a PhD chapter. Your challenge here is to work out which are the core one or two decisions that you have made, that then make the arguments and theories and contribution that you've made to your research problem, make the most sense.

The next principle of writing about research methods is to think about whether you can state and eliminate your alternatives. Now this is closely related to the challenge of writing about your decisions. Decisions imply that you had a decision to make - that there was an alternative thing or process that you could have done. Is that in your research design? In the questions that you've posed? In the sample that you've identified? In the community that you've worked with? In the location? Or even in the analytic technique? If you like, a kind of off-the-shelf method is to take one of the decisions that you've made, to list the alternatives that you felt were available, whether they were fully valid alternatives or not, and then to explain why you rejected those particular alternatives. This is a great way of demonstrating to your readers, particularly if your readers are examiners,

that you're not a one-trick pony, that you've understood that there's a range of different methodological approaches and that you've thought about as many of them as is reasonable, before coming up with a well-warranted decision.

The next principle when writing about research methods, is to write with openness, clarity and charity. When we think about charity, what we mean by that is when we're dealing with alternative positions and alternative perspectives, we give them the benefit of the doubt before we offer our critique. Openness and clarity are really about full disclosure; about really explaining to your readers why you have to do this, and why you decided to do that, without hiding anything from them.

Most academic readers of research materials are bright and experienced people. If there's any sense that you're hiding something, or not being fully honest about the methodological decisions that you've made, or at least the reasons for them, they will be onto it, and the credibility of your writing will suffer.

Another good thing to consider and some types of research and some kinds of researchers might not want to do this, is to make a nod to what we might call situational details. Most of what you write is going to really cover formal methodological decisions but often they're only really understandable in the context of the practice of the research. For instance you may be researching in a location where the experience of doing that research could be dangerous, it could be difficult, it could be hard to find gatekeepers, it might even be hard to find safe, good places to conduct interviews or to even liaise with the people that you're working with. These kinds of situational details really need to be discussed in order for your readers to understand why you did this and not that in your research. This can even apply to experimental methods you may be working for instance, in a hospital that has this equipment and not that equipment, and of course that will lead you to using that type of equipment and develop that kind of experiment, rather than something that might have been available to you somewhere else. These practical situational details may often feel prosaic, but can add real meaning to the readers understanding of why you developed a particular methodological design.

Those of you writing in a quantitative tradition will often be encouraged to write for replication, and this is really my next principle. Now obviously if you're writing in a qualitative tradition the whole notion of replication doesn't really apply to you. So it's up to you to make a decision about whether

writing for replication is for you or not. If it is for you the challenge is to give enough context, enough information and also to justify the choice of designs that you came up with, in such a way, that your readers could go off and repeat the study.

An even better way of thinking about writing for replication is to consider writing for improvement and replication. Not only should you give your fellow researchers enough information, enough detail, to repeat the study themselves in exactly the way that you did, but you should then also reflect on how that study might be improved, so that the academic community can then go and implement these improvements themselves.

The next principle is really one to help you in your own writing decision making. There are so many things that you can write about when you're writing about your research methods. The next principle is if in doubt everything relates to your research problem. One of your challenges as a writer is really to decide what to include and what to exclude. Now that can be difficult, but the issue is how does this thing, that I'm writing about methods, actually speak to my encounter with my research problem and what does it say to my readers about how I've developed theory or how I've developed an argument. Now if you're struggling to answer that question well or clearly it may be that this is an indicator that this is something perhaps less important to discuss, than perhaps something else. This allows you again to be more grounded, to write in a more meaningful way and be less abstract, and it's also I think good advice to help you getting, to help you avoid getting side-tracked down kind of avenues of discussion that might not obviously be meaningful to your readers, they may wonder why you're there for instance.

The next challenge is to consider identity, and again this is a topic that varies enormously by methodological approach and also by discipline. There are some fields of inquiry where thinking about who you are as a researcher and the impact that you might have isn't really something that's expected in your research writing. Obviously, of course in many of the social sciences the issue of identity is absolutely key, and the issue of identity in terms of reflecting and allowing you to think about how you, yourself as a researcher have impacted on those around you when you've conducted your research is absolutely key. It's another prompt for your methodological writing. Practically then, when you're doing your own writing you need to ask yourself and tell your readers, and of course be reader focused, how has who I am as a researcher potentially changed the questions I can ask, the way I even think about my problem, the responses

I might get, the way I interpret my data, the theories I come up with, and of course the methods I choose. Reflecting on these issues is a great prompt to get us deep into the world of research methods writing.

Another common approach to writing about research methods is a kind of chronological approach. Now this can either be a setting out of the research project as a journey from A to B, and a kind of ticking off of the key points along that journey, or equally commonly, it can be in the form of a kind of before and after structure. 'This is what I did in my pilot'; 'This was what my hypothesis was'; and 'This is what I ended up doing'. Either way both approaches lend themselves to a full discussion of core research methods decisions and are very handy ways to structure your own engagement with method and to structure and plan your own writing.

I would also encourage you, when you're writing about methods is to always look for your unique contributions, the precedents and the innovations. Now that can sound quite intimidating. For most of us, we don't come up with a new research method, we don't come up with a new research design. And so I want you to see this as a challenge for you to think about precedents, contributions and innovations, in what could potentially be a fairly humble way. It could be that you're the first person to use a particular method in a particular location, or you could be the first person to use a well-known and well tried method using new technology, particularly as I've already mentioned, mobile phone technology. It may be that you've used a particular method and it's not quite worked for you in the context of your own research and that's allowed you to reflect differently on that particular method.

Many of you though, if you think about it, will have something quite unique to say about method, and this is something that your fellow readers are likely to be extremely interested in. So if you can identify methodological innovations, flaunt them. Are you the first person to ask a particular question to a particular group or individual? Are you the first person to work with a particular issue, in a particular place or population? These are all unique contributions. If you don't have any of these, particularly if you're writing a research paper for instance, that could be a message to you that you don't need to write too much about method. Those of you thinking about writing a methodological article though, should really be focused on those unique contributions, innovations and precedents.

The next point I make could make me sound like a bit of a new age guru, and this is not something that, you know, I want you to think that I am, but I

would urge you, when writing about methods more than other parts of your research writing, to view every problem as an opportunity. Really! Difficulties that you have in making sense of your data, difficulties that you might have in non-response for instance, challenges you might have with negative results or missing data, the seeming incoherence of it all, are all potentially prompts for you to write about. It may not seem like good news but all of these challenges are ways for you to tackle issues of methodology, ways for you to think about where it was issues of methodology that helped you, or hindered you, and ways for you to think about how you might tweak or improve things next time around. So if you can bear to, when thinking about writing about method, every problem that you faced could be a writing opportunity.

Now with all of this, as I've said, the challenge for all of us as writers, is not so much what to include, but what to leave out. Now if we're writing about methods in the context of writing about other elements of our research and writing about our findings, the question of how much space to devote to method, really boils down to a question of what difference did method make. If the honest answer to that is not very much, then potentially the methodological sections of your writing can be smaller, but if the answer to the question of what difference did methods make is everything, in terms of my theoretical understanding of my topic, in terms of the developments of my arguments, in terms of my readers understanding of what I'm doing here, then that is your prompt, probably, to write a lot more about issues of method and methodology.

Now finally my last principle is that you should always, within your method writing, have some form of conclusion or self-evaluation that's an honest appraisal of what you did. Now easy ways is to think about this is how would you redesign your research with the benefit of hindsight or potentially with more resources and even more money. What went wrong? Why did it go wrong? How would you do it again in the future? How would you advise other researchers doing your kind of research, to apply what you've learnt to their research?

So if you can consider concluding with honest self-evaluation, it reveals you to be an open-minded and reflective writer of method.