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General Advice for Contributors

Factors You Can Control When Writing a Paper

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Existing literature on writing for publication has pointed out that a publishable paper should:

1) answer the 'so what' question;

2) place the paper in context of existing literature;

3) address research questions raised;

4) consist of good writing;

5) match the scope and content of the journal; and

6) follow the journal's guidelines.

Every journals has its own requirements regarding topics, writing styles, length, and other elements that they are looking for. Generally, when you read their guidelines for authors, it becomes clear how you should approach a topic. Often, they tell you to look in recent issues to clarify some of these requirements. But the 'how' has not received much attention. There are two areas that you, as the writer, can control. The first is how you frame your topic and contextualize your paper; and the second is how you go about answering the questions you have raised.

Framing and Contextualizing Your Problem

In stating your problem, you need to relate your paper to existing literature, especially theory-based research literature. It is not enough to have an interesting question that you or others have raised to an existing problem and answer it. The question that will be raised by the reviewers and editors is the familiar "so what?" By "contextualizing" your paper, you are referring to problems raised by existing research or pointed out through a re-interpretation of existing data. You may also address problems overlooked by others, or problems raised by the use of new technology or new uses for existing technology. You are covering new ground. Your paper should also point out avenues for further research such as questions raised but not answered by your paper. In this sense, someone reading your paper can know where you came from and to where you are pointing. You want to make your paper a stopping point on a journey, not a detour with only local roads going in and coming out.

Methodology

Decide on a methodology appropriate to your question and one you can defend before you start to gather the bulk of your data. This is not to say that you should have a clear methodology before you start your project. You have to do some reading and perhaps gather some data to decide on what is appropriate. But don't let your chosen methodology dictate your topic or use an inappropriate methodology because you feel comfortable with it. If your intent is to understand a problem, then probably qualitative methods would work. If you want to describe a problem and predict future developments, then quantitative may be appropriate. In any case, you may want to look at one or two books or articles about methodology before you start to gather the bulk of your data. While you can speculate, don't try to do too much extrapolation with your data. Keep in mind that it is extremely hard to draw causal relationships with a quantitative study. Quantitative studies are good for description and prediction. They are snap shots of the real world from one perspective.

If your methodology is inappropriate for your problem, the reviewers will let you know. That is not to say that some reviewers may be biased toward certain methodologies. The less chance you give them to question your methodology, the better. When appropriate, take a paragraph to say why your chosen methodology is appropriate for your topic before your describe your methodology. Most journals are not interested in a detailed description of the methodology except to make sure that it is appropriate and it is carried out well, unless the paper is about a new use for an old methodology or a new methodology.

If you are basing your study on a single institution, it is a case study whether you are using qualitative or quantitative methods. However, this is perfectly acceptable if your research is exploratory in nature and you just want to see which variables are relevant or if you are creating new theories. You can also use a particular case to verify an existing theory. There are also times when you want to use a combination of methods.

If you are doing a quantitative study, take a careful look at your numbers and sources for the numbers. If your complete universe is fairly small, say 150-200 cases, try to use the whole thing. If you need to choose a sample, make sure it is random. If it is not random, the study may be biased and you cannot generalize from the conclusions. Taking every twentieth entry from a list is not random. Use a table of random numbers (or generate a list of random numbers on the computer). If your sample is random, you can get away with a relatively small sample. A lot of statistical tests are "robust". That is to say that results from a small sample will not be much different from the results from a large sample. The magic number is "30". A random sample of 30 subjects will give you pretty accurate results. Keep in mind that randomness applies more than just to the numbers you choose from a list but how that list is compiled. For example, a public opinion poll based on a random selection of telephone numbers from a telephone book is not really random because it is biased against people who do not have phones, who have unlisted numbers, who rely on cell phones, or whose names do not appear in the phone book for some other reason. A sample of student opinion about the library based on students who walk through the door every 15 minutes is not random because lots of students don't use the library. Survey research, whether done through interviews or on the Web, is quantitative.

A second point that should be considered is that a high or low correlation between two variables says nothing about the relationship between those two variables unless there is some other reason

to believe those variables are related. For example, there is a high correlation for younger children between height and reading ability. The high correlation is there only because for that age group, taller kids are generally older and have been in school longer. Similarly, journal use among resident and commuting students may not mean much unless you control for majors because journals are not something that undergraduates in the sciences use often. Do not measure something just because it is measureable.

When you are doing qualitative research such as direct observation or interviewing, the issue of randomness depends on your purpose. If you want to understand an issue, you may want to bias your sample. For example, if you are interested in how successful reference librarians use the Web at their libraries, you can choose, perhaps by recommendations from colleagues, to interview a dozen of the "best" reference librarians and cull from their answers those attributes that are present in the majority of the cases. If, at the same time, you survey reference librarians about their use of Web resources in general, you may be able to reach some conclusions on whether the attributes of successful librarians are also shared by your average librarian. If those attributes are not shared, then you may be able to say that those attributes are what we should strive to acquire.

Revisiting Framing and Contextualizing for Analysis

In looking at theories, you should see how your problem fits in with existing theories. If yours is a problem raised by another paper, you can re-examine the theoretical base of that paper. Whether you are looking at new data that you have gathered or re-interpreting existing data, you may verify existing theories, extend them to changing circumstances, disprove them, or establish new theories. By looking at new problems, you may be offering extensions to existing theories or creating new theories. However, you must be cautious that your approach is not too narrowly focused, even if you think that what you have is rationally developed. Something is rational only if you and your readers share the same or similar assumptions. When necessary, explain your assumptions. It is from a solid theoretical foundation that you can start to generalize your findings. However, as you extrapolate or generalize, you must examine your assumptions in order not to exceed the boundaries of your framework or the quality of your data.

Conclusion

The two things you can control are 1) how you define your topic and relate it to the rest of the world, and 2) how you go about answering the questions you have raised. You want the reviewers to concentrate on your choice of topic, your analysis, and your conclusions. You don't want them to have trouble getting to your place on the map and then raise questions on the quality of your directions.

The important point is that when you put your mark (*the paper*) on a map, there should be roads leading to it (*your literature review*), descriptions of points of interest and where they are (*your data and methodology*), what these interesting things mean (*your analysis*), and other opportunities for people interested in looking further (*topics for additional research*). If your topic is interesting, people will come to it via the path you've outlined and be able to leave by another means instead of retracing the old footsteps and treat your paper as a nice detour.