

How to Write a Research Statement

Morton Ann Gernsbacher and Patricia G. Devine

<https://www.psychologicalscience.org/observer/how-to-write-a-research-statement>
APS Observer, 26(8), pp. 17-19 (2013)



Task #1: Understand the Purpose of the Research Statement

The primary mistake people make when writing a research statement is that they fail to appreciate its purpose. The purpose isn't simply to list and briefly describe all the projects that you've completed, as though you're a museum docent and your research

publications are the exhibits. “Here, we see a pen and watercolor self-portrait of the artist. This painting is the earliest known likeness of the artist. It captures the artist’s melancholic temperament ... Next, we see a steel engraving. This engraving has appeared in almost every illustrated publication of Mary Shelley’s *Frankenstein* and has also appeared as the television studio back-drop for the ...”

Similar to touring through a museum, we’ve read through research statements that narrate a researcher’s projects: “My dissertation examined the ways in which preschool-age children’s memory for a novel event was shaped by the verbal dialogue they shared with trained experimenters. The focus was on the important use of what we call elaborative conversational techniques ... I have recently launched another project that represents my continued commitment to experimental methods and is yet another extension of the ways in which we can explore the role of conversational engagement during novel events ... In addition to my current experimental work, I am also involved in a large-scale collaborative longitudinal project ...”

Treating your research statement as though it's a narrated walk through your vita does let you describe each of your projects (or publications). But the format is boring, and the statement doesn't tell us much more than if we had the abstracts of each of your papers. Most problematic, treating your research statement as though it's a narrated walk through your vita misses the primary purpose of the research statement, which is to make a persuasive case about the importance of your completed work and the excitement of your future trajectory.

Writing a persuasive case about your research means setting the stage for why the questions you are investigating are important. Writing a persuasive case about your research means engaging your audience so that they want to learn more about the answers you are discovering. How do you do that? You do that by crafting a coherent story.

Task #2: Tell a Story

Surpass the narrated-vita format and use either an Op-Ed format or a Detective Story format. The **Op-Ed** format is your basic five-paragraph persuasive essay format:

First paragraph (introduction):

- broad sentence or two introducing your research topic;
- thesis sentence, the position you want to prove (e.g., my research is important); and
- organization sentence that briefly overviews your three bodies of evidence (e.g., my research is important because a, b, and c).

Second, third, and fourth paragraphs (each covering a body of evidence that will prove your position):

- topic sentence (about one body of evidence);

- fact to support claim in topic sentence;
- another fact to support claim in topic sentence;
- another fact to support claim in topic sentence; and
- analysis/transition sentence.

Fifth paragraph (synopsis and conclusion):

- sentence that restates your thesis (e.g., my research is important);
- three sentences that restate your topic sentences from second, third, and fourth paragraph (e.g., my research is important because a, b, and c);
and
- analysis/conclusion sentence.

Although the five-paragraph persuasive essay format feels formulaic, it works. It's used in just about every successful op-ed ever published. And like all good recipes, it can be doubled. Want a 10-paragraph, rather than five-paragraph research statement? Double the amount of each component. Take two paragraphs to introduce the point you're going to prove. Take two paragraphs to synthesize and conclude. And in the middle, either raise six points of evidence, with a paragraph for each, or take two paragraphs to supply evidence for each of three points. The op-ed format works incredibly well for writing persuasive essays, which is what your research statement should be.

The Detective Story format is more difficult to write, but it's more enjoyable to read. Whereas the op-ed format works off deductive reasoning, the Detective Story format works off inductive reasoning. The Detective Story does not start with your thesis statement ("hire/retain/promote/award/honor me because I'm a talented developmental/cognitive/social/clinical/biological/perception

psychologist”). Rather, the Detective Story starts with your broad, overarching research question. For example, how do babies learn their native languages? How do we remember autobiographical information? Why do we favor people who are most similar to ourselves? How do we perceive depth? What’s the best way to treat depression? How does the stress we experience every day affect our long-term health?

Because it’s your research statement, you can personalize that overarching question. A great example of a personalized overarching question occurs in the opening paragraph of George Miller’s (1956) article, “The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information.”

My problem is that I have been persecuted by an integer. For seven years this number has followed me around, has intruded in my most private data, and has assaulted me from the pages of our most public journals. This number assumes a variety of disguises, being sometimes a little larger and sometimes a little smaller than usual, but never changing so much as to be unrecognizable. The persistence with which this number plagues me is far more than a random accident. There is, to quote a famous senator, a design behind it, some pattern governing its appearances. Either there really is something unusual about the number or else I am suffering from delusions of persecution.

I shall begin my case history by telling you about some experiments that tested how accurately people can assign numbers to the magnitudes of various aspects of a stimulus. ...

In case you think the above opening was to a newsletter piece or some other low-visibility outlet, it wasn’t. Those opening paragraphs are from a *Psych Review* article, which has been cited nearly 16,000 times. Science can be personalized. Another example of using the Detective Story format, which opens with your broad research question and personalizes it, is the opening paragraph of a research statement from a chemist:

I became interested in inorganic chemistry because of one element: Boron. The cage structures and complexity of boron hydrides have fascinated my fellow Boron chemists for more than 40 years — and me for more than a decade. Boron is only one element away from carbon, yet its reactivity is dramatically different. I research why.

When truest to the genre of Detective Story format, the full answer to your introductory question won't be available until the end of your statement — just like a reader doesn't know whodunit until the last chapter of a mystery. Along the way, clues to the answer are provided, and false leads are ruled out, which keeps readers turning the pages. In the same way, writing your research statement in the Detective Story format will keep members of the hiring committee, the review committee, and the awards panel reading until the last paragraph.

Task #3: Envision Each Audience

The second mistake people make when writing their research statements is that they write for the specialist, as though they're talking to another member of their lab. But in most cases, the audience for your research statement won't be well-informed specialists. Therefore, you need to convey the importance of your work and the contribution of your research without getting bogged down in jargon. Some details are important, but an intelligent reader outside your area of study should be able to understand every word of your research statement.

Because research statements are most often included in academic job applications, tenure and promotion evaluations, and award nominations, we'll talk about how to envision the audiences for each of these contexts.

Job Applications. Even in the largest department, it's doubtful that more than a couple of people will know the intricacies of your research area as well as you do. And those two or three people are unlikely to have carte blanche authority on hiring. Rather, in most departments, the decision is made by the

entire department. In smaller departments, there's probably no one else in your research area; that's why they have a search going on. Therefore, the target audience for your research statement in a job application comprises other psychologists, but not psychologists who study what you study (the way you study it).

Envision this target audience explicitly. Think of one of your fellow graduate students or post docs who's in another area (e.g., if you're in developmental, think of your friend in biological). Envision what that person will — and won't — know about the questions you're asking in your research, the methods you're using, the statistics you're employing, and — most importantly — the jargon that you usually use to describe all of this. Write your research statement so that this graduate student or post doc in another area in psychology will not only understand your research statement, but also find your work interesting and exciting.

Tenure Review. During the tenure review process, your research statement will have two target audiences: members of your department and, if your tenure case receives a positive vote in the department, members of the university at large. For envisioning the first audience, follow the advice given above for writing a research statement for a job application. Think of one of your departmental colleagues in another area (e.g., if you're in developmental, think of your friend in biological). Write in such a way that the colleague in another area in psychology will understand every word — and find the work interesting. (This advice also applies to writing research statements for annual reviews, for which the review is conducted in the department and usually by all members of the department.)

For the second stage of the tenure process, when your research statement is read by members of the university at large, you're going to have to scale it down a notch. (And yes, we are suggesting that you write two different statements: one for your department's review and one for the university's review, because the audiences differ. And you should always write with an

explicit target audience in mind.) For the audience that comprises the entire university, envision a faculty friend in another department. Think political science or economics or sociology, because your statement will be read by political scientists, economists, and sociologists. It's an art to hit the perfect pitch of being understood by such a wide range of scholars without being trivial, but it's achievable.

Award Nominations. Members of award selection committees are unlikely to be specialists in your immediate field. Depending on the award, they might not even be members of your discipline. Find out the typical constitution of the selection committee for each award nomination you submit, and tailor your statement accordingly.

Task #4: Be Succinct

When writing a research statement, many people go on for far too long. Consider three pages a maximum, and aim for two. Use subheadings to help break up the wall of text. You might also embed a well-designed figure or graph, if it will help you make a point. (If so, use wrap-around text, and make sure that your figure has its axes labeled.)

And don't use those undergraduate tricks of trying to cram more in by reducing the margins or the font size. Undoubtedly, most of the people reading your research statement will be older than you, and we old folks don't like reading small fonts. It makes us crabby, and that's the last thing you want us to be when we're reading your research statement.