

Writing guide for authors

Jane Smith stared, bleary-eyed, at the new email that had popped into her inbox. How could this have happened, and so quickly? She was tired from long nights of data analysis. Her study had been difficult to run, and the empirical details complex, but the results had come out beautifully and she was sure that the findings would make a splash. She'd worked hard on writing it up and was so proud to have sent it to the journal. But here was the email saying that while the findings were interesting, the policy implications were vague, and the paper was being rejected as an unlikely fit for the readership. How was she to have known that they would care so much about policy implications? And then she remembered the BSP Writing Guide for Authors. If only she had read it through, perhaps things could have been different.

What distinguishes BSP

BSP occupies a unique niche; it is an outlet for academics and academic-minded practitioners to share their findings with readers, policymakers and others, who are looking to solve real-world problems. As such, it is neither a traditional academic journal, nor a popular magazine. It seeks articles that provide actionable policy guidance that are well supported by rigorous behavioral science research.

The policy focus of BSP requires a writing style different from that with which many academic researchers use. This style guide provides submitting authors with clear recommendations for writing a paper that will appeal to BSP editors and readers. Here you will find guidance on BSP article rhetorical style and structure, figure design and formatting, and the opportunity to post Supplemental Material online.

Writing style

Maintaining balance between writing for a popular science audience and communicating scientific rigor can be difficult, especially in light of the word count

limits of BSP articles. Authors' should prioritize the following: (1) scientific rigor, (2) concrete and actionable policy and/or applied implications for a specific audience, and (3) clear and compelling writing that will appeal to a broad readership. The latter imperative suggests that articles take more of a storytelling approach than is typical for most academic publications. Many scientific details (including ancillary empirical analyses and nuanced connections with prior scientific literature) can be placed in endnotes and Supplementary Material, which we describe below.

BSP writing editors help authors improve the readability and clarity of all articles, and how you can tell your story effectively.

Tell a good policy story

Academics typically prefer didactic writing, but most readers find narratives more compelling. Try to open with an anecdote that helps motivate the need for your proposal, research agenda, or review. For empirical papers, consider telling a story about your studies from the perspective of researchers or participants.

- a) <u>Identify the problem, challenge, or puzzle</u>. Most good stories start with a source of conflict: a problem or puzzle that needs solving. A story can draw readers into your article as they search for the solution that you propose. Alternatively, a simple anecdote may do, or even a quotation from an outside source that highlights the some key aspect of the issue you are addressing. There is no single formula for BSP articles, but most articles should begin by motivating the problem they address.
- b) <u>Describe the solution</u>. Once you have seized the reader's attention by motivating a problem or puzzle that needs solving so that the reader recognizes the need for a solution, your job is to preview your solution. That is, foreshadow your punch line for the readers so they can see why they should bother reading further. Many of our policy readers will not continue past the first several lines or sentences of your article if they do not see its value and relevance to issues they face.
- c) <u>Provide supporting evidence</u>. The balance of the paper should provide details of the solution. This should include some motivation that grounds the solution in relevant behavioral science principles or research. It should also include rigorous empirical evidence that suggests your proposed solution will achieve the desired objectives in the relevant context.

Please note that your description of the problem and initial outline of the solution should take up less than half the article, with the remainder reserved for elaborating how to achieve and/or implement the solution along with your supporting evidence. Note that in traditional behavioral science journals, authors typically identify a problem and then devote the majority of the article to problem analysis, with a section at the end that offers at most a few half-hearted ideas for solutions or practical applications of the work. Successful BSP papers will: (a) rigorously define and motivate a policy or applied problem, and then (b) develop a well-considered, well-described, and well-supported

solution that is aimed at a specific audience of policy makers and/or practitioners.

Note how different this approach is from the traditional academic journal article. Most academic publications begin with a broad overview of the relevant literature, which gradually "funnels" down to the specific hypotheses tested. In those cases, the only problem to be solved may be a specific gap in the theory.

Make it simple and easy to remember

Remember that what readers glean from articles they read is at least as important as the details conveyed in your article. Most readers take away between one and three major points from articles at most. Research suggests that material is better liked and judged to be more truthful when concepts are conveyed with clarity. Work hard to simplify your message. This doesn't mean dumbing the message down—our core readership will be educated and intelligent—it means prioritizing what you want your readers to remember. We recommend:

- a) <u>Prioritize your messages</u>. Tell the core story first, then layer on any necessary nuances as needed. Reserve technical details for endnotes and/or Supplementary Material online.
- b) <u>Provide roadmaps for your readers</u>. First, tell them what you are going to say (or what puzzle you are going to solve), then communicate your core message, and, finally, review it. Consider using an easy-to-understand figure or table that helps capture, organize, and/or depict the major ideas in your paper.
- c) <u>Use an accessible writing style</u>. Write as you speak. Use simple declarative sentences. Eliminate jargon or clearly define any absolutely necessary terms. Make liberal use of concrete illustrations/examples along with any higher-level abstractions. Try to use sensory language to paint mental pictures of your proposal and how it will enhance policy or practice effectiveness.
- d) <u>Make it visual</u>. If you are presenting results of data analysis, try to find a way of presenting them visually to help your readers quickly apprehend what is going on. Think specifically about who you audience is that will be using this material and make sure you have visually depicted your results in a way that speaks to their specific concerns cutting out what they do not need to know. For more on this, see Tufte's (2001) *The Visual Display of Quantitative Information* and/or McCandless' (2014) *Knowledge is Beautiful*.
- e) <u>Have a memorable punch line</u>. Make sure the actionable implications in your paper are evident and easy to use. Consider using mnemonic tools such as an acronym or a rhyming slogan to help remind readers what they need to take away from your article.

Make your story compelling.

To maximize their impact, BSP articles must motivate a broad readership to dive in and continue reading until they reach your conclusion. Thus, we encourage authors to use principles of good journalism and narrative fiction. In particular:

- a) <u>Engage surprise and curiosity</u>. Research suggests that in order to seize readers' attention you need to violate expectations. Starting with an anecdote that poses a puzzle or makes a wry observation is one way to accomplish this. To hold readers' attention you need to highlight information or knowledge "gaps" that you fill with the elements of your argument.
- b) <u>Make the story credible</u>. BSP articles will only be acted upon to the extent that they are believable. Naturally, the authors' scientific credentials and BSP's dual-review process will confer some external credibility. In addition, authors should strive to enhance their believability by helping readers understand why the main result or argument "makes sense" in the end, even if it was a surprise at first glance. Authors should use human-scale statistics and emphasize vivid, personal details to facilitate this understanding.
- c) <u>Engage emotions</u>. Remember that most of your readers care more about people than numbers or abstract principles. Try to emphasize the human scale of your behavioral intervention or principle and illustrate with vivid, personal examples. Try to appeal to the identity of particular readers and make sure that you keep in mind both a general audience (of educated lay readers, scientists, and policy makers) and a specific audience (who can act on your proposal or suggestion). Try to appeal to readers' self-interest and identities.

For more on crafting such messages, we refer authors to Heath & Heath's (2008) book, *Made To Stick*.

Structure

Many scientific details that typically would be part of a standard academic paper, including ancillary empirical analyses and nuanced connections with prior scientific literature, may not be relevant to the entire BSP audience. At the same time, both peer reviewers and a subset of the BSP readership will require this information to evaluate the scientific rigor of the work. BSP's structuring of content aims to strike a balance between the expectations and needs of these two types of readers. Therefore, we defer much of this information to linked endnotes and supplementary material that motivated readers can consult. We also accommodate the needs of both types of readers in other ways, such as through two different abstracts (an academic abstract due at submission and a nonacademic summary of the "idea in brief" that is written after a paper is provisionally accepted).

1) <u>Abstracts</u>. BSP articles will all begin with a short, accessible abstract that we label a "Summary." Summaries should be no more than 150 words long and will generally include: (1) a few sentences outlining important details of your article (e.g., the basic design and results of studies for Findings, the content and basis of the relevant policy recommendation for Proposals, or the major topics surveyed and conclusions drawn for Reviews and Essays); (2) a sentence highlighting the scientific contribution of the paper (i.e., what behavioral scientists can learn from the paper or how they can use the result); and (3) a sentence highlighting who in the policy/practitioner audience can

benefit from your paper and how they can act on the content of your paper. If authors (or the writing editor) thinks that the paper would benefit from an additional, more detailed and technical abstract, this can be added to supplementary materials.

- 2) <u>References and Notes</u>. To maintain an uninterrupted reading experience and shorten page requirements, refrain from within-text citations. References should be listed in the order of their appearance in your article as endnotes employing APA citation style. This matches Science and PNAS, only the endnotes can be full titles, etc., APA style.
- 3) <u>Empirical methods</u>. The study design and methods section of your article should be significantly shorter than is traditional in most academic work. The up-front details should provide a brief description of the study participants, as well as how they were recruited and compensated. Study design details should describe concisely the materials and instructions in an easy-to-follow, conversational style. A more complete elaboration of your methods should be provided as supplementary material for the interested scientific reader. That material should be sufficient for other researchers to be able to replicate your study design.
- 4) <u>Empirical results</u>. The results section should focus on clearly describing the important findings of the research. Like the methods section, additional analysis, and even some details on the statistical assumptions made to support the main analyses, can be placed with the supplementary material. Remember that the goal is to provide credible evidence in support of your policy recommendations within the main text, while also offering the complete details needed for peer review and/or replication in the supplementary material. Comparisons of means and/or meaningful effect sizes can be reported in the main text (although displaying them in a figure also is encouraged), but detailed statistical output (e.g., tables of regression coefficients, model fit statistics, mediation analysis path calculations, etc.) belongs in the supplementary section.

Figures and tables

Figures should be reader-friendly elements of an article that communicate the main results of the research. To make interpretation as easy as possible for nonexpert readers, all figures must include self-contained, interpretable legends. In other words, a reader should be able to understand the relationship(s) characterized by the figure without having to read the article text. An effective figure not only conveys a significant aspect of your argument, it also prompts people to seek greater understanding by reading an article in its entirety.

Since many of the statistical details will likely are available only in the Supplemental Material, inclusion of error bars in figures can be very useful to scientific readers who wish to evaluate the significant differences in means. We encourage authors to include error bars in their figures wherever possible.

Formatting figures and tables

For the print edition only: Each figure will appear in black, white, or grey in the print edition. Submit each figure or table as individual file, not embedded in a manuscript. Name each file with the corresponding author's name and the Figure # or Table #. Example: Zhang_Figure1 or Zhang_Table1

Tables must be submitted in editable Word files

Figures: Send original files of charts or diagrams AND the data files used to create them. Charts and diagrams must be submitted in one of two formats:

Excel charts or diagrams.

EPS (encapsulated postscript) file or an Adobe Illustrator file (with all text outlined or fonts provided) charts or diagrams.

If you are building one figure with more than one file, just name those files with the corresponding author's name, the Figure #, and TOP or BOTTOM or LEFT or RIGHT.

Example: ZhangFigure1_TOP or ZhangFigure1_RIGHT and, if needed:

ZhangFigure1DATA_TOP or ZhangFigure1DATA_RIGHT

Submit images as: High-resolution tiff or jpeg files (at least 600 dots per inch when scaled to the size at which it will be reproduced). Name these too with the corresponding author's name.

Example: ZhangEPAStickerScan or ZhangBallotPhoto.

Supplemental Material

- The Supplemental Material file includes technical discussions and data. While this material is unlikely to engage nonexperts, expert readers will find useful when trying to fully understand and assess a manuscript's arguments and evidence. These documents are referred to in BSP's print edition and appear online in the digital edition.
- Tables: Insert tables into SM manuscript in Word format so they are editable.
- Figures: Insert figures into SM manuscript. All words and images must be of adequate size and resolution to be legible in a .pdf format.
- Editable text on figures is appreciated. If not possible, editors will convey figure edits with comments and authors can change the text themselves and resubmit files.

(Figures published online can use color.)

Supplemental text: Additional information regarding control or supplemental experiments, fieldwork, observations, hypotheses, etc., directly related to arguments in the print paper.

Methods and analysis sections (each labeled)*

- 1. Methods
- 2. Materials
- 3. Data, Analyses & Results

Place the bulk of descriptions of materials and methods online as supplementary materials here; in print, provide just enough description as is needed to support the logic of the text.

*Frequently authors organize passages describing research by describing one study at a time. For example, you might produce a section that is titled Study 1 that contains these three subsections: Methods, Materials, and Data, Analyses & Research. A section Study 2, with the same subsections, etc, would follow that.

Multimedia: video, audio, and photographs: Provide links to multimedia content. Or, if publishing multimedia elements that an author did not create, submit evidence that the content has the equivalent of an appropriate Create Commons license or that you obtained permission to use the material in your BSP article and/or Supplemental Material.

References To maintain an uninterrupted reading experience and shorten page requirements, we ask that you refrain from within-text citations. References should be listed in the order of their appearance in your article as endnotes employing APA citation style. This matches Science and PNAS, only the endnotes can be full titles, etc, APA style. Place footnotes in brackets that allow for a list of numbers. For example: [1,5,22]. Additional references can be posted in Supplementary Material online.

Summary

Overall, editors will be looking to work with authors to find creative ways to balance readability and scientific rigor. This balance is achieved both through the "sticky" writing style of our articles, and through the structure of content. One of the many benefits of a strong online presence for the journal is that readers can dive deeper into the details of any given manuscript by reading its Supplementary Material online. Throughout the process, the final decision on wording will remain with the authors, although the BSP editors reserve the right to decline to publish articles that do not meet BSP standards for readability. We will never override your concerns as authors, but we will work with you to make the writing as clear, interesting, and convincing as possible.

Editors' note: For more insight into the kind of work that BSP seeks, carefully read articles previously published by the journal and look over our Editorial Policies and Information for Authors.