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Balancing Expectations for Research Transparency: Institutional Review Boards, Funders, and Journals

Mneesha Gellman¹, Matthew C. Ingram², Diana Kapiszewski³,
& Sebastian Karcher⁴

1. Emerson College 2. University at Albany, State University of New York

3. Georgetown University 4. Syracuse University

KEYWORDS: Research Transparency, Replication Crisis.

Introduction

The discipline of political science has been re-engaged in debate about the value and challenges of research transparency since 2010.¹ Pursuing research transparency with respect to a piece of scholarship means striving to be clear and open about how you collected the evidence on which its claims and conclusions rest; detailing the steps you took and methods you used to analyze that evidence; and making that evidence available to the degree that you can do so ethically and legally. When disciplinary discussions about research transparency were reinvigorated in the early 2010s, some scholars who use quantitative data and statistical methods in their work were already accustomed to pursuing transparency, while most scholars who analyze qualitative data had less practical experience with making their research transparent.

Multiple dynamics triggered the regeneration of the debate about research transparency. A key driver was what was termed the replication crisis in the social sciences identified first in psychology (see Simmons, Nelson, and Simonsohn 2011), i.e., the discovery that research findings—including those advanced in well-known work built on by other scholars or used in policymaking—could not be replicated.² Greater transparency in the conduct of research, facilitating the assessment of scholars' data and methods, was seen as an antidote to that crisis. In addition, various government entities (e.g., the Office of Science and Technology Policy 2020; see also Holdren 2013) introduced policies and proposals to encourage research transparency and data sharing. Some foundations and other research funders also started to require that funding proposals include a “data management plan” (DMP) discussing how the data generated through the supported research would be disseminated more broadly (e.g., the National Science Foundation [NSF] 2011, 2019 and the National Institutes of Health 2003, 2019). Journal editors, in turn, began to develop stronger standards for transparency for the work published in their outlets.

In response to, and to advance, the conversation, APSA developed the “Data Access and Research Transparency” (DA-RT) initiative (Lupia and Elman 2014), which generated suggestions to update the American Political Science Association's *Guide to Professional Ethics* (2012) to clarify transparency principles.³ The speed and content of disciplinary discussion, as well as steps journal editors took to instantiate principles of openness in their journals' standards and guidelines, generated hesitancy among some political scientists, especially scholars who use qualitative data and methods. The “Journal Editors Transparency Statement” (JETS), signed by more than two dozen editors between 2014 and 2015, caused particular concern.⁴ In November 2015, almost 1,200 political scientists signed a public petition calling

on journal editors to delay implementing new transparency guidelines until additional, more inclusive discussion could occur.⁵ Shortly thereafter, in January 2016, 20 APSA past presidents sent a public letter to the 27 journals that had signed JETS expressing concern about the statement's language and requesting clarification on how it would be interpreted.⁶ Discussion also continued on panels and roundtables at disciplinary conferences, via journal articles (e.g., Fujii 2016, Monroe 2018, Kapiszewski and Wood 2021) and symposia on transparency (e.g., in *Qualitative Methods and Multi-Method Research* [Spring 2015] and the newsletter of the Comparative Politics section of APSA [Spring 2016]), as well as through the *Qualitative Transparency Deliberations* (see <https://www.qualtd.net/>), which produced 14 individual reports, summarized in Jacobs et al. (2021).

As this discussion illustrates, research transparency has been a core focus of conversation among political scientists over the last decade, resonating with concerns about open science across the social sciences, natural sciences, and beyond (Baker 2015; OSC 2015; Baker and Penny 2016; Bohannon 2016; Zeiler 2016). To be sure, few if any scholars in the discipline have argued against transparency; as is well recognized, research transparency promotes inclusivity and robust research practices, accelerates discovery, reduces duplication of effort, and empowers collaboration.⁷ Instead, the discussion has revolved around whether, and if so how, openness can be achieved ethically and in ways that honor scholars' epistemological commitments.

Given the centrality of this debate, it is critical for graduate students to understand how transparency affects the landscape facing them with regard to intellectual production, publication, and professional advancement. This chapter helps you to do so. In the next section, we discuss some of the central benefits of and challenges to actuating openness; we consider in particular the difficulties that sensitive human-participants data pose to pursuing transparency. In the third section, we offer concrete strategies that graduate students who use quantitative and/or qualitative data and methods can use to pursue transparency and interact productively with key institutional stakeholders, including Institutional Review Boards (IRBs), potential funders of their research, and academic journals; we give special attention to the question of how graduate students can both achieve openness and protect the people they involve in their research. We close by enjoining graduate students to join the conversation and suggesting an overarching orientation that they might adopt toward making their work transparent—"as open as possible, as closed as necessary" (European Commission 2016).

Benefits of and Challenges to Actuating Transparency

In this section, we discuss three central benefits of research openness and three key challenges to achieving it. To begin, pursuing research transparency offers a window on the inner workings of your scholarship, demonstrating its rigor and power. The limits that journals, in particular, impose on the length of the scholarship published on their pages often prohibit authors from showing all of the analytic work and evidence that support the descriptive and causal inferences they draw in their scholarship, or the claim they make to have achieved empathetic interpretation. Scholars who use quantitative methods, for instance, can rarely display in the text of an article all of the regressions and robustness checks they ran; scholars who use qualitative data can rarely clearly discuss the details of data collection, or deploy all of the evidence they collected that supports their points. Enhancing the transparency of your scholarship, for instance by adding a methodological appendix (see Grossman and Pedahzur 2021) or using Annotation for Transparent Inquiry (ATI),⁸ gives you an opportunity to include that detail, making your work more persuasive to reviewers and readers alike.

Second, pursuing transparency brings your work into line with emerging expectations for high-quality political science research. Many journals have well-developed and long-standing requirements for openness for quantitative scholarship, and guidelines are beginning to emerge for qualitative inquiry. Moreover, a growing number of top journals (e.g., *International Organization* and *American Journal of Political Science*) engage in what they term "pre-publication replication:" they only publish work if its findings can be reproduced. It is only possible to carry out such evaluation on open scholarship. Likewise, as noted earlier, increasing numbers of funding organizations (e.g., the NSF as well as the Ford, Gates, and MacArthur Foundations) are calling on grantees to make the scholarship produced

using their funding open, including, in some cases, sharing the underlying data. Meeting these expectations, within ethical and legal limits, allows your scholarship to be funded and published, and marks it as aligned with the broad disciplinary consensus on the value of openness.

Finally, being more open about how you generated your research results and sharing the empirical basis of your work—always within ethical and legal limits—allows your scholarship to be used more broadly and to achieve wider-ranging purposes. Scholars being transparent about their research practices and sharing their data helps members of research communities to identify synergies between each other's work and empowers collaboration. Also, open scholarship can be built upon more easily, and can be replicated, leading to an expansion of our knowledge about critical political outcomes. In fact, studies find that articles with shared data receive between 25 percent and 70 percent more citations than comparable articles without shared data (e.g., Piwowar, Day, and Fridsma 2007; Colavizza et al. 2020). Likewise, open scholarship can be used to teach research methods, helping future generations of graduate students to be stronger social scientists. Openness, in other words, serves as a bridge between your research and the broader benefits it can generate.

Yet achieving openness ethically and legally and in ways that align with your epistemological commitments also poses important challenges. A first set are practical and professional. Taking the steps necessary to make quantitative and qualitative research more open can be time-consuming. Scholars—and perhaps graduate students in particular—may feel that the time they could potentially dedicate to making one piece of scholarship more open would be better spent conducting more research or writing another manuscript. Likewise, scholars may face logistical challenges: if your research rests on jurisdictional details depicted in large maps that you pored over in a far-away archive, how can those “data” be shared? Moreover, there are few immediate and obvious professional payoffs for making your work more open.

Epistemological challenges also arise as scholars consider engaging in research openness. As disciplinary debate has recognized from the very start (Elman and Kapiszewski 2014), there can be no single approach to achieving transparency. Political science is a heterogeneous discipline: scholars adopt diverse approaches to study political phenomena, hold varying epistemological commitments, and use an array of methods of analysis. The approach to transparency taken by a scholar who employs quantitative data and methods should and will diverge greatly from that of a scholar who uses interpretive methods, given those scholars' very different beliefs about how we know what we know. Moving toward openness as a discipline requires that particular research or epistemic communities develop, discuss, and continue to refine norms for transparency. Yet not all research traditions have had robust conversations about these issues. This gap leaves uncertainty among scholars about what would be considered an epistemologically appropriate way to make their work more open.

A final set of challenges are ethical and legal, and impinge most directly on the data sharing aspect of transparency. Ethical challenges arise most clearly and acutely for scholars whose work involves “human subjects” (e.g., who conduct interviews, focus groups, surveys, or experiments). All scholars who engage with people and draw on the fruits of that engagement in their research presentations and products are ethically bound to solicit and secure those people's informed consent to participate in the research project, and to adhere strictly to the agreements they and participants strike with regard to how the information participants convey will be stored, used, and disseminated. If you promise your respondents confidentiality (that you will keep private the information they convey) or believe that you may put respondents at risk if you share that information, what strategies can you use for sharing data? Likewise, if the information underpinning your work is under copyright or proprietary (i.e., owned by someone else), what approaches can you take to sharing them more broadly?

Strategies for Actuating Openness

Fortunately, social scientists and information scientists are developing diverse strategies for pursuing research transparency and interacting productively with the institutional stakeholders with whom scholars engage as their scholarship traverses the research lifecycle. In this short piece we cannot do these emerging and evolving techniques justice; for useful overviews see Blair et al. (2019), Firchow and

Gellman (2021), Ingram (2021), and Kapiszewski and Karcher (2021b). Instead, we identify and discuss three overarching strategies that you can adopt as you consider how to engage in research openness.

First, it is critical that you begin to think about how you will pursue transparency—and start to plan your strategy—from the earliest moments of envisioning and designing a research project. The choices you make as you design and implement research significantly shape and influence how open you can ultimately make that study and how you can do so. Moreover, making your work transparent is much easier if you have had doing so in mind from the start—if you create a DMP; carefully document (describing and justifying) all the research design choices you make as you conduct your study; and keep your data safe, secure, accessible, and comprehensible. While taking each of these steps facilitates research openness, doing so also benefits you and the future you, and strengthens your work.

One context in which graduate students can learn and experiment with transparency techniques is in methods courses (quantitative and qualitative). For instance, in quantitative courses, you can learn practices to increase the transparency of your entire workflow—from data generation, through cleaning and analysis, to reporting. Ingram (2021) advocates a set of 11 practices,⁹ and illustrates how they can be implemented in R and Stata, two common statistical software packages. For instance, command files (i.e., scripts) can be used in the same way research notebooks are used in other disciplines,¹⁰ documenting all stages of a project. Sharing these files with collaborators (including advisors and co-authors) facilitates communication. Such files (or at least documentation of where they can be found) can also be submitted to journals prior to publication in fulfillment of their requirement for providing replication materials. Methods courses can also introduce the logic and basics of preregistration. Preregistering publicly your data collection and analysis strategies is quickly becoming a norm in particular for experiments (e.g., in the EGAP registry); it also holds great promise for observational and qualitative research (see Jacobs 2020). For qualitative research specifically, techniques such as interview appendices (see Bleich and Pekkanen 2015) and others outlined in Kapiszewski and Karcher (2021b) can also be taught in methods courses. If transparency practices are not covered in your methods courses, you should encourage your instructor to discuss them. Moreover, you should ensure that any methods courses you teach integrate transparency techniques (see, e.g., Ingram 2021) (see also chapter 29 for additional suggestions about your first teaching experience).

Second, avail yourself of available resources—on and off-campus—as you consider what strategies to adopt to make your work transparent. Your campus IRB (on which more below) and library (in particular data librarians) are wonderful places to start. If the funding organizations supporting your work have expectations about transparency, engage actively with them about those expectations; if you are unsure that you can meet them or how to do so, discuss your concerns with them and solicit their guidance and support. If you have a particular outlet in mind where you would like to publish your research, review any transparency standards or guidelines it has for the kind of work that you do and contact the editor with questions or concerns. As you interact with these different stakeholders, think actively about how harmonious their expectations are; if there are conflicts among them, enjoin the different parties to help you resolve the tensions. Reach out to organizations that focus on research openness and can offer guidance and assistance, such as the Open Science Foundation (OSF), the Berkeley Initiative for Transparency in the Social Sciences (BITSS), and data repositories such as ICPSR and the Qualitative Data Repository (QDR).¹¹ You might also contact scholars whose work is similar to yours to solicit their thoughts and input on how to pursue openness.

Finally, we offer some more detailed advice on how to engage productively with your campus IRB—and other IRBs with which you may need to interact—to simultaneously pursue openness and protect human participants you involve in your research. Some scholars experience confusion over how to secure approval for their human subjects research, particularly at research institutions with strict IRBs (Babb 2020: 77–83) or when an IRB's practices continue to hew to the medical model on which they are based. Nonetheless, creating a productive partnership with the IRBs with which you engage can help you to enhance the quality and transparency of your research, and deepen your ethical commitments. We consider each in turn.

First, IRB protocols and other materials can serve as an integral part of a transparent and effective research design, regardless of your methodology. Creating IRB materials can help you to define, clarify,

and improve various aspects of the research process such as contacting subjects, sampling criteria, interview questions, and informed-consent protocols. You may recognize these as standard elements of grant proposals for dissertation research funding and of DMPs. Indeed, we recommend that you create these related documents simultaneously, allowing you to ensure that their content aligns: for instance, promises about data sharing and about confidentiality need to be reflected in both your DMP and your IRB materials. Creating solid documentation strengthens your research and empowers transparency.

Second, the practices that you describe in your IRB materials serve as a baseline or starting point for indispensable reflection on the ethics of human participant research and your obligations to the people you involve in your work. One excellent way to ethically increase the transparency of your research with historically and contemporarily marginalized populations is to engage collaboratively with research participants (Gellman 2021). In sum, while creating the materials required by IRBs requires time and work, the IRB process helps scholars improve their research, protect the people they involve in it, and enhance its transparency.

Conclusion

As the length and detail of this volume suggest, you have many competing priorities as you pursue a graduate degree in political science. A host of exciting challenges and wonderful opportunities lie on the research road ahead. Achieving research transparency should not be a weighty concern for you. Taking the steps necessary to make the products of your inquiries as transparent as you can within ethical and legal limits should simply be part of your standard operating procedures as a researcher. We encourage you to think carefully and critically about how to do so, and to avail yourself of the many resources that are available to help you consider options, make informed choices, and embrace the ethical pursuit of open science. Moreover, as we have suggested, discussions about transparency are still open and ongoing in the discipline, and we encourage you to join them, bringing new perspectives and insights. By working together, the many research communities that comprise our rich and heterogeneous discipline will arrive at epistemologically appropriate strategies to make all kinds of inquiry more transparent.

Endnotes

- 1 This discussion builds on decades of debate in political science and other disciplines; see e.g., King 1995.
- 2 A confusing array of terms is used to describe the various strategies that can be used to “reappraise” (Gerring 2020) research. In this piece we use the term “reproduce” to describe evaluating a study by reanalyzing the same data and using the same methods employed by the original author to see if the same results obtain; and “replicate” to describe evaluating a study by collecting new data (likely from the same population) and analyzing them using the same methods employed by the original author to see if the same results obtain.
- 3 In April 2020, the APSA Council approved a new “Principles and Guidance” document drafted by an Ad Hoc Committee on Human Subjects Research that APSA had charged in 2017 with identifying broad ethical principles that could guide research on human subjects.
- 4 The JETS text can be found here: <https://www.dartstatement.org/2014-journal-editors-statement-jets>
- 5 The petition can be found here: <https://dialogueondartdotorg.files.wordpress.com/2015/11/petition-from-concerned-scholars-nov-12-2015-complete.pdf>
- 6 The public letter can be found here: <https://politicalsciencenow.com/letter-from-distinguished-political-scientists-urging-nuanced-journal-interpretation-of-jets-policy-guidelines/>
- 7 The website of the Center for Open Science (<https://www.cos.io/>) offers excellent discussions of the benefits of research transparency.
- 8 You can learn more about ATI here: <https://qdr.syr.edu/ati>; see also Kapiszewski and Karcher 2021a.
- 9 These practices are: (1) setting a working directory, (2) using hierarchical subdirectories, (3) placing original data in the appropriate subdirectory, (4) creating relevant metadata and placing

- it in the working directory, (5) using command files, (6) using relative file paths, (7) setting the computing environment, (8) tracking versions of materials, (9) saving results to files, (10) file naming, and (11) commenting extensively.
- 10 Command files include directory structure, computing environment (version, packages, etc.), loading original data, all steps for cleaning and organizing data, key steps in the analysis, and key steps in reporting, including tables and figures.
 - 11 OSF: <https://osf.io/>; BITSS: <https://www.bitss.org/>; ICPSR: <https://icpsr.umich.edu/>; QDR: <https://qdr.syr.edu>

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