Comment: Promoting Research Integrity in Political Science

Trisha Phillips, *West Virginia University*

Researchers studying the incidence of research misconduct in science have found that fabrication, falsification, and plagiarism and questionable research practices are far more common than anyone would like to admit (Fanelli 2009). Given the potentially widespread nature of these problematic behaviors, and the harm they present to science, the discipline, and the public, it is important to develop programs to promote research integrity. In their article, "Trust, Transparency, and Replication in Political Science," Laitin and Reich make a number of proposals for promoting ethics in research (2017). In the face of an experimental revolution, and widely publicized scandals, this matter is becoming increasingly urgent.

As Laitin and Reich note, disciplinary norms are already changing with more support for pre-registration of data analysis plans and transparency in data and analytic procedures. But Laitin and Reich make an important statement when they write, "We think more should be done." Indeed, integrity in research requires more than valid and reproducible findings. They suggest a number of changes for graduate training, publishing practices, data sharing, and the handling of misconduct allegations.

Laitin and Reich do not claim to be presenting evidence-based best practices; in fact, the field of research on research integrity is so new that there are very few evidence-based practices. Rather, their goal is to open a conversation about the ways in which disciplinary practices should evolve, and this commentary continues the conversation by considering two of their proposals and their underlying theory.

Laitin and Reich suggest expanding graduate curriculum to include training in research ethics. This is a great suggestion. Research ethics education is an important mechanism for promoting both integrity and accountability in research. Federal agencies mandate this training for certain funding programs, but these mandates apply only to students and post-doctoral researchers who are supported by these funds (NIH 1989, NIH 2009, NSF 2009). Disciplinary norms, institutional cultures, and program idiosyncrasies determine whether graduate students who are not externally funded get training in research ethics. These disciplinary norms are strong in the health sciences and some social sciences, but not political science. My own research has shown that only three of the top eleven graduate programs in political science offer courses on research ethics, and none of the programs requires students to complete the course. In contrast, ten of the top eleven programs in psychology offer courses in research ethics, and more than half of these programs require students to complete the course (Phillips, Nestor, and Beach 2016).

Since the first ethics instruction programs were developed nearly 30 years ago, the content and delivery methods have evolved to address the increasingly social, technical, and regulatory complexity of science. A recent meta-analysis of studies evaluating the effectiveness of education programs in research ethics shows sizable benefits to participants in terms of knowledge, skills, and attitudes, and these benefits appear to hold over time (Watts et al. 2016). While there is model curricuum for general sciences and some social sciences, there is no model curriculum for political science. Effort will be required to develop and teach these courses, but there is often internal and external support for these endeavors. Research ethics can be taught on-load as stand-alone courses, or part of professional seminars and methods courses. The National Science Foundation (NSF) has funded a number of course development and train-the-trainer (T2) programs, and may fund more in the future; the Office of Research Integrity (ORI) also offers T2 workshops. Curriculum development, T2 workshops, and research ethics training would also be good topics for APSA "short-courses."

Laitin and Reich also suggest an "information escrow" to overcome the "professional code of silence." In order for science to be self-correcting, people who suspect mistakes or misconduct need to voice their concerns, but Laitin and Reich worry that people are reluctant to do this because whistleblowing could result in harm to their reputations or employability. To protect whistleblowers (and researchers who might be falsely accused), Laitin and Reich propose a web platform in which the whistleblowers have revocable anonymity, researchers have revocable confidentially, and an independent editor vets submissions and oversees the process. The idea is that a person could anonymously raise questions about a researcher's work, and the researcher could respond in a confidential setting, so that concerns might be resolved without unnecessarily damaging anybody's reputation or employability. This is an interesting suggestion, but one that would require effort and resources to develop, maintain, and supervise. Until this happens, political scientists would do well to make use of other whistleblowing resources that are already available: institutional RIOs and journal retraction protocols.

By federal mandate, any institution applying for Public Health Service (PHS) funding must have an administrative process for investigating allegations of scientific misconduct (PHS 1989, PHS 2005). To help institutions comply with this policy, the Office of Research Integrity (ORI) issued "Model Policy" and "Model Procedures" guidelines, which include the appointment of an institutional Research Integrity Officer (RIO) (ORI 2005). PHS oversees NIH, so most research universities have an RIO, a process for investigating allegations, a process to protect whistleblowers, and a process to restore the reputation of researchers who are falsely accused. The complaints that initiate the investigative process can come from people internal or external to the researcher's institution; and most institutions subscribe to EthicsPoint, which allows allegations to be made anonymously. Because the RIO has authority within the organizational structure of the researcher's

Trisha Phillips *is an associate professor in the department of political science at West Virginia University. She can be reached at trisha.phillips@mail.wvu.edu.*

doi:10.1017/S1049096516002377

home institution, the researcher must respond to the accusation and participate in the process. The investigations are confidential; all parties involved in the proceedings are informed of the outcome; and findings of error or misconduct result in corrections or retractions of published research and datasets.

Another way to report suspicions of error or misconduct in published research is to contact the editor of journal in which the research is published. Many journals are members of the Committee on Publication Ethics (COPE), and the COPE Code of Conduct states that editors "have a duty to act if they suspect misconduct or if an allegation of misconduct is brought to them. This duty extends to both published and unpublished papers" (COPE 2011). COPE also provides guidelines and flowcharts for handling cases of suspected misconduct. The process they recommend includes informing the whistleblower that a inquiry has begun, seeking a response from the researcher, referring the case the appropriate RIO when the response is unsatisfactory, and finally, informing the whistleblower of the outcome.

Given that both institutional and journal processes are designed to protect the whistleblower from harm, and to protect the confidentiality of the communications with the author, it is not clear that an information escrow provides any additional benefits. Furthermore, the institutional and journal processes have the advantage of motivating the researcher to respond because both the RIO and the journal editor have the power to impose sanctions.

Finally, it is important to note that "police patrols" and "fire alarms" are only one of several strategies for preventing research misconduct and promoting research integrity. While the early efforts to promote research integrity focused primarily on establishing rules and procedures to identify and adjudicate cases of misconduct, new strategies have developed as we learn more about the incidence and causal factors for research misconduct and questionable research practices (Steneck and Bulger 2007). These strategies include developing educational programs, improving organizational culture, and incentivizing and rewarding good behavior. The most recent World Conference on Research Integrity (WCRI) highlighted the importance of organization cultures, incentives, and rewards in the conference theme: *Research Rewards and Integrity: Improving Systems to Promote Responsible Research* (WCRI 2015). To be sure, Laitin and Reich call for educational programming in research ethics; and they call for changes to organizational culture when they suggest that advisors require advisees to "archive and version control their code and data." But continued use of "police patrol" and "fire alarm" metaphors, with their focus on establishing rules and procedures to identify misconduct, might unnecessarily constrain creativity as political science works to develop a more holistic approach to promoting research integrity. ■

Given that both institutional and journal processes are designed to protect the whistleblower from harm, and to protect the confidentiality of the communications with the author, it is not clear that an information escrow provides any additional benefits.

REFERENCES

Committee on Publication Ethics (COPE). 1999, 2007, 2011. *Code of Conduct and Best Practice Guidelines for Journal Editors.* Section 11. Available at: http://publicationethics.org/files/Code%20of%20Conduct_2.pdf. Accessed September 15, 2016.

Fanelli, Daniele. 2009. "How Many Scientists Fabricate and Falsify Research? A Systematic Review and Meta-Analysis of Survey Data." *PLoS ONE.* 4 (May): e5738.

Laitin, David and Robert Reich. 2017. "Trust, Transparency, and Replication in Political Science." *PS Political Science & Politics* 50 (1): this issue.

National Institutes of Health (NIH). 1989. "Requirement For Programs on the Responsible Conduct of Research in National Research Service Training Award Institutional Training Programs." *NIH Guide for Grants and Contracts* 18 (45): 1. http://www.grants.nih.gov/grants/guide/historical/1989_12_22_Vol_18_No_45.pdf (Accessed June 14, 2016).

National Institutes of Health. 2009. *NIH Update on the Requirement for Instruction in the responsible conduct of research.* NOT-OD-10-019. https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html/. (Accessed June 14, 2016).

National Science Foundation (NSF). 2009. Responsible conduct of research. NSF's implementation of Section 7009 of the America COMPETES Act. *Federal Register*, 74 (160), 42126–42128. http://www.gpo.gov/fdsys/pkg/FR-2009-08-20/html/E9-19930.htm (June 14, 2016).

Phillips, Trisha, Franchesca Nestor, and Gillian Beach. 2016. "Benchmarking Research Integrity in Publishing and Graduate Education: A Comparative Study." Poster presented at the *Annual Meeting of the Midwest Political Science Association*, Chicago.

Office of Research Integity (ORI). "Sample Policy and Procedures for Responding to Allegations of Research Misconduct." Available at http://ori.hhs.gov/sample-policy-procedures-responding-research-misconduct-allegations. (Accessed September 15, 2016).

Office of Research Integity (ORI). "ORI Handbook for Institutional Research Integrity Officers." Available at http://ori.hhs.gov/rio-handbook (Accessed September 15, 2016).

Public Health Service Act. 1989. Section 493. *42 CFR Part 50.*

Public Health Service Act. 2005. Section 493. *42 CFR Part 93.*

Steneck, Nicholas and Ruth Bulger. 2007. "The History, Purpose, and Future of Instruction in the Responsible Conduct of Research." *Academic Medicine I* 82 (9): 829–34.

Watts, Logan, Kelsey Medeiros, Tyler Mulhearn, Logan Steele, Shane Connelly, and Michael Mumford. 2016. "Are Ethics Training Programs Improving? A Meta-Analytic Review of Past and Present Ethics Instruction in the Sciences." *Ethics & Behavior* Available through online first at: http://www.tandfonline.com/doi/full/10.1080/10508422.2016.1182025 (September 15, 2016).

World Conference on Research Integrity (WCRI). 2015. "Research Rewards and Integrity: Improving Systems to Promote Responsible Research." Rio de Janeiro, Brazil. http://www.wcri2015.org. Accessed on September 15, 2016.

STUDENT RESOURCES

The American Political Science Association provides many resources for graduate and undergraduate political science students. **Join today to take advantage of these opportunities!**

ORGANIZED SECTIONS & AWARDS

APSA Organized sections provide an opportunity for APSA members who share a common interest in a particular subfield to organize meetings, coordinate communications, and share knowledge and ideas. For a complete list and descriptions of all organized sections, please visit the website at **www.apsanet.org/sections** or contact us at **sections@apsanet.org**.

Numerous APSA Organized Sections offer awards specifically targeted to students of political science.

The following sections offer awards for **best graduate student papers**:
African Politics Conference Group, Elections, Public Opinion,and Voting Behavior, Foreign Policy, Law and Courts, Political Communication, Political Networks, Presidents and Executive Politics

The following section offers an award for **best undergraduate student paper:**
Presidents and Executive Politics

The following sections offer graduate student **travel awards**:
Elections, Public Opinion, and Voting Behavior, European Politics and Society, Political Psychology

RESEARCH FUNDING

Centennial Center for Political Science and Public Affairs encourages individual research and writing in all fields of political science. Check out our website for current funding opportunities.

GRADUATE STUDENT CONNECTION

APSA has a number of resources to offer graduate students, including:
Learn about *dissertation workshops at the Annual Meeting* (where students receive a significant discount) that provide in-depth guidance and discussion on dissertations in progress.

DIVERSITY & INCLUSION PROGRAMS

Ralph Bunche Summer Institute is an intensive five-week program held at Duke University designed to introduce the world of doctoral study in political science to undergraduate students from under-represented racial and ethnic groups.

Minority Student Recruitment Program is a collaboration between undergraduate and graduate programs in political science that connects undergraduate students from under-represented backgrounds who are interested in, or show potential for, graduate study with graduate programs interested in recruiting diverse cohorts of doctoral students.

Minority Fellows Program is a fellowship competition for individuals from under-represented backgrounds applying to doctoral programs in political science.

APSA Mentoring Program connects interested graduate students and junior faculty with political scientists who have made themselves available as mentors.

APSA AWARDS

Students can be nominated for one of the numerous APSA awards given each year to promising young scholars:

Gabriel A. Almond Award for the best dissertation in the field of comparative politics

William Anderson Award for the best dissertation in the general field of federalism or intergovernmental relations, state and local politics

Edward S. Corwin Award for the best dissertation in the field of public law

Harold D. Lasswell Award for the best dissertation in the field of public policy

Helen Dwight Reid Award for the best dissertation in the field of international relations, law, and politics

E.E. Schattschneider Award for the best dissertation in American government

Leo Strauss Award for the best dissertation in the field of political psychology

Leonard White Award for the best dissertation in the field of public administration

LEARN MORE AT WWW.APSANET.ORG