

Responsible Research in *Studies in the Social Sciences*

Heather A. D. Mbaye
University of West Georgia

Research is global in practice and impact. This article refocuses research and delineates what the editorial team plans for *Studies in the Social Sciences*, arguing that social scientists should be explicit about how their research translates into real-world recommendations. Rather than assume that their readers will draw a conclusion that would result in positive social or political change, scientists should incorporate practical advice to societal actors. This journal aims to make social research more accessible to societal and governmental stakeholders through peer-reviewed open access publication with a focus on research that aims to create positive improvement in the human condition.

Science. Knowledge. Research. Global in scope, impact, and practice. More than ever before, science is a product of a global community of researchers. As a result, researchers must reexamine what it means – and what the processes and pitfalls are – to do responsible research. This article reviews the differing conceptions of research and research agendas in the United States and abroad, particularly within the European Union. Next, it reviews the Responsible Research and Innovation scheme initiated by the EU, examining issues of ethics and values as a matter of responsible research, and addresses responsible collaboration in research. In conclusion, the article gives practical advice to those who would publish their responsible research in *Studies in the Social Sciences*.

Responsible Research and Innovation

According to the European Commission, Responsible Research and Innovation creates a new paradigm within scientific research that “that anticipates and assesses potential implications and societal expectations with regard to research and innovation, with the aim to foster the design of inclusive and sustainable research and innovation” (Commission 2019). Responsible Research and innovation (RRI) is founded upon a network approach in which community actors, businesses, government, and researchers work

together to solve problems and align them with society’s needs. That is to say, given the strictures of the academic tenure system, academics should formulate their research responsibly for positive social change and to positively influence the societies in which they operate.

Within RRI, the European Union identifies 5 thematic areas. First, responsible research must be publicly engaged. Public engagement contributes to a more scientifically literate society, brings new perspectives into research design, and fosters societally relevant research that seeks solutions to societal problems. In order to be publicly engaged, researchers should seek to engage stakeholders in open and iterated dialogue which involves the broadest possible set of actors, in which everyone is invited to participate in setting the goals of the research. Furthermore, the broadest set of actors should also be involved in the process of carrying out the research and participate in the dissemination of results.

The second important theme is that science must be open. Unlike research, typically proprietary or published in copyrighted journals with their associated cost and accessibility issues, science is and always has been public and open. The EU encourages all member states to make all publicly funded research open. This journal, *Studies in the Social Sciences*, is an open-access journal by design. In short, this theme states that all

research results should be accessible to the public.

The third theme in the EU's RRI scheme is promoting gender equality. The EU will only fund research in which the team is gender-balanced and removes the barriers that often prohibit women from full participation in scientific endeavors. Gender balance is also encouraged by the EU in research decision-making groups and on advisory boards. Importantly, the EU also states that "integrating the gender dimension in research and innovation (R&I) content helps improve the scientific quality and societal relevance of the produced knowledge, technology and/or innovation" (Commission 2019).

Fourth, the EU focuses on integrity and ethics in research. In the United States, science education has assumed that students learn the best practices of research by participating as junior colleagues and by observing good research programs as they are carried out by senior principal investigators. The ethical considerations central to the US system are internal threats: that is, micro-level focus on the individual and the irresponsible behaviors of the researcher that may threaten the process of science. These would include, for example, plagiarism, fabrication of data or results, falsification, sexual misconduct or harassment of graduate students, or other individual deviations from accepted practice. All of these are also important in the RRI paradigm. However, the RRI also focuses on potential misuse of research findings or technological advances. This would include the misapplication of research findings in public policy, by corporations, by the private sector, government agencies including the military, or the media. Finally, the EU cautions against relaxation of ethical guidance when conducting research in countries with lower ethical standards in research.

Finally, RRI focuses on science education in order to promote scientific growth. The EU

focuses on all levels of education in science, from primary school to graduate work.

Values-based Research under RRI

Scientists aim to contribute to a common fund of knowledge. The underlying assumption is that knowledge will make the world a better place. However, attention to ethical actions and the paradigm of responsible research is necessary, lest they undermine the very basis of their activity.

Regardless of location, the responsible conduct of research is based on fundamental human values. Research must first be honest; research and the dissemination of results must be open, full, and without deception. Second, research must be fair. Colleagues and students must be treated without bias, credit must be given where it is due (and not given it when it is not warranted), and students must be mentored fairly, regardless of background, gender, or national origin.

Thirdly, when scientists conduct research, they must look beyond their preconceptions and must privilege observation and empirical evidence: that is, they must be objective. Although researchers are all inherently biased, biases can be overcome when they are acknowledged. Researchers must be skeptical, constantly reexamining and re-testing their results, taking nothing for granted. Research must be reliable – that is, the methods must be replicable – and it must be accountable to other researchers. Finally, researchers' findings and data must be openly available: providing an open forum for the dissemination of responsible research is the primary reason for the existence of this journal.

Finally, research must be socially responsible; that is, it should be explicit in its efforts to improve upon the human condition and to safeguard human society. The College of Social Science and the University of West Georgia, who publish this Journal, are committed to the public good. Universities are

recognizing that they need to connect to their communities in a responsible way. To that end, research published in this journal should seek to improve the human condition, whether on a micro- or macro-level.

Scientists, as a rule, aim to contribute to a common fund of knowledge; the underlying assumption of which is that knowledge will make the world a better place. However, they must be vigilant in attention to ethical issues as well as issues of responsible research, lest they undermine the very basis of scientific research.

Collaboration Among Researchers

Research requires collaboration because often specialization means that a researcher's closest peers may be dispersed around the world. Those who study a specific may be widely dispersed geographically and sometimes their specializations make collaboration not only desirable but also more productive.

Another reason for scientific collaboration revolves around the research question itself. Objects of study aren't equally distributed around the world. For a researcher in the United States studying Berber culture, collaboration with a Moroccan colleague who can connect with the Berber people more directly would be fruitful. Similarly, research equipment, scientific instruments, and research sites, among others, may tempt scientists to cooperation.

Some collaborations are based on unacceptable motivations. Researchers may be motivated to create cooperative research programs by a desire to be affiliated with a particular senior researcher as a means to advance their careers, as such affiliation may bring with it more funding or better publication opportunities. Some researchers may emphasize data collection in countries with non-existent protections for human subjects in an effort to take advantage of

vulnerable populations. Per the RRI guidelines, this is unacceptable behavior. Researchers take advantage of the lack of paperwork but place the populations they study at risk. Some researchers (and the companies that employ them) undertake research in countries where labor is cheap or where participation in risky research projects can be purchased very inexpensively. While most honest scientists would eschew working in corrupt circumstances if it could be avoided, some may find it easier to work in countries in which a payment to an unscrupulous official can pave the way to quick project approvals.

Other considerations also come into play. National research paradigms can vary in a variety of ways that make research collaboration more difficult, making it challenging for researchers to "be on the same page". According to Anderson and Stenek's 2010 book *International Research Collaborations*, certain dimensions of national research systems frame cooperative projects.

The underlying framework most important in shaping research collaboration is the organization of the research itself. The question being: who completes the work? Is it academics, the government, or business? For example, Anderson and Stenek 2010 report that in Hong Kong, 64% of research and development (R&D) is done by academics, 33% by business, and only 3% by the government sector. In Japan, however, business takes the lead and completes 75% of the research; academics account for only 14%, and the government only 9%. In Indonesia, by contrast, 81% of research is done in the government sector, with 14% completed by businesses and a paltry 9% completed by academics. Some governments exert centralized control over the scope and method of the research agenda. In China, for example, funding is awarded to universities in accordance with national goals and for specific research agendas. EU Frameworks have

diverted research toward specific goals and agendas as well.

While some countries make collaboration very difficult, some, like the United States make it very desirable, both among Universities and between universities and businesses, through funding opportunities, patents, and licenses. Even in countries in which collaborative research is promoted, patterns of authority aren't always the same within those teams, which can influence communication patterns and create difficulties in conducting the research. It is desirable to understand these issues, so potential problems can be deflected.

Additionally, the laws and legal systems of a country can significantly impact research collaborations. When laws and legal systems are mismatched, it can be very difficult to determine whose laws apply, particularly in contract negotiations. Tax systems, passport and visa issues, and intellectual property rights are three other important areas in which legal questions may arise. For example, if you want to collaborate with American researchers, you must not run afoul of export control laws related to trafficking in arms or dual use activities, or information related to those: graduate students working with nuclear applicable technology and knowledge must not be from countries with export control on such knowledge. Finally, paying bribes to foreign officials, either directly or through another person, by a US citizen is strictly prohibited, even if it is accepted practice in other countries.

International collaborations also require an understanding of various regulatory oversight policies. Policies and processes specific to research vary from country to country; some nations have much stronger guidelines than others. Research misconduct such as plagiarism and falsification are difficult to address across borders. In 2007, the Organization for Economic Cooperation and

Development's Global Science Forum issued a statement of best research practices, addressing issues of scientific integrity and research misconduct. The "Best Practices for Ensuring Scientific Integrity and Preventing Misconduct" statement encompassed such central malpractices as falsification and plagiarism, but also included a list of research practice design problems (such as the mistreatment of subjects), data management misconduct like withholding data, publication related issues like inappropriate authorship attribution, personal misbehavior including harassing research subjects, grad assistants, or other collaborators, and issues like misuse of funds or inadequate peer review. Following this release the OECD published a practical guide to investigating research misconduct internationally. While an admirable start, there remains no single body that can regulate cooperative research programs.

The standards and policies of the United States often serve as a default standard when other global criteria are absent. This is in part due to the very pronounced US system of oversight as well as the large US financial interest in international projects. However, this US dominance may be undesirable in many areas: it can be difficult to reconcile Western and non-Western ideals. The US focus on individual level ethical issues can cause macro-ethical considerations of social responsibility to fall by the wayside.

Most research teams include graduate students or post doctoral fellows. These early career colleagues account for a large portion of cross-border scientific migration. In addition, countries vary considerably in the amount of supervision students receive; in the United States, doctoral students do regular foundation coursework in academic departments before they are allowed to commence their dissertation study; in some other countries, graduate work is much more individualized

and contains very little or no foundation coursework, so shared research paradigms may be more difficult to create.

Global research must be responsible above all, both internally and externally. Senior researchers must therefore take into consideration all of the internal threats to research that have been outlined herein. They must understand that research must be conducted to the highest standards. Many are now appalled at the reports of research carried out in earlier decades involving the abuse of vulnerable populations, and scientists are now focused on prohibiting such work from happening again.

In the United States, researchers are beginning to adopt the global idea that investigators have a responsibility to society when they create and perform research. At the American Association for the Advancement of Science Annual Meeting in Boston in 2013 the Director of the Scientific Responsibility, Human Rights, and Law Program at AAAS, Mark Frankel, argued that “...much of the emphasis in science is on the professional responsibility of scientists to stick to ‘standards agreed upon by the scientific community’ regarding how research should be conducted...”, according to Elizabeth Pain in Science Magazine. Further, according to Pain, “[h]e called these responsibilities ‘internal.’ But scientists also have ‘external,’ social responsibilities ‘toward the larger community,’ Frankel argued—and ‘it is no longer acceptable to focus on internal responsibilities.’ Science depends on public money, affects policy decisions, and offers risks and benefits to society. ‘The communities in which you live and the communities much farther out ... are ultimately affected by the work that you do,’ ” Frankel said, according to Pain. Researchers must sometimes strike a precarious balancing act between micro ethical or internal issues of responsibility and their macro ethical social responsibilities.

Studies in the Social Sciences

Scientists should be explicit about how their research translates into real-world recommendations. Researchers cannot assume that readers will draw a conclusion that would result in positive social or political change. Peer reviewed journals can provide a forum in which scientists can publish their best work that incorporates practical advice to societal actors. This journal aims to make social research more accessible to societal and governmental stakeholders through peer-reviewed open access publication with a focus on research that aims to create positive improvement in the human condition. The Journal provides a forum for peer-reviewed research in all social and human sciences, including political science, sociology, criminology, mass communications, anthropology, psychology, economics, history, geography, pedagogy, and all others. The editorial board invites the submission of the highest quality research that incorporates practical advice to stakeholders, decision makers, and leaders among groups that seek the advancement of human society and the elevation of the human condition.

References

- Anderson, M. (2011). “International Research Collaborations: anticipating challenges instead of being surprised.” *The Europa World of Learning*. Routledge.
- Anderson, M. S. & Steneck, N. H. (2011). *International research collaborations: Much to be gained, many ways to get in trouble*. New York: Routledge.
- Commission of the European Union. (2019). *Responsible research & innovation*. <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>. Accessed 9 January 2019.

Interacademy Partnership. (2016). *Doing Global Science*. Princeton: Princeton University Press.

Mbaye, H. (2019). "Responsible Research in Social Science: What Stakeholders Want from Academics." *Studies in the Social Sciences* 2020:1.

Organization for Economic Cooperation and Development's Global Science Forum.

2007. *Best Practices for Ensuring Scientific Integrity and Preventing Misconduct*. <http://www.oecd.org/science/inno/40188303.pdf>

Pain, Elizabeth. (2013). "The Social Responsibilities of Scientists". *Science*. <https://www.sciencemag.org/careers/2013/02/social-responsibilities-scientists> . Accessed January 9, 2019.