Shifting Perspectives on Research Integrity

It is safe to assume that the readers of the Journal of Empirical Research on Human Research Ethics (JERHRE) are all in favor of research integrity. It is also likely, however, that their conceptions of research integrity vary, sometimes in significant ways. Such variations are due to readers’ research experiences, national origins, current employment sites, and their levels in the structural hierarchy of science. An official in a government funding agency in the United Kingdom, a postdoctoral researcher in an emerging field in Malaysia, and a chemistry department chair in a university in Kentucky, USA, may have different perspectives on what constitutes research integrity and what is most important in maintaining the credibility of science.

Other differences are due to macro-level changes in perspective on research integrity, visible on the global scale as shifts over time. These changes have not occurred at once in every country, but rather have emerged in a progression of stages. The World Conferences on Research Integrity (2018) were begun at a time when researchers in various countries were at quite different stages in their thinking about research integrity. Over the course of the past decade, the World Conferences have reflected and documented major shifts in how research integrity is viewed and supported.

Years ago—50 or more by some calculations, only 20 or 30 by others—the integrity of science was guarded by the principle of collective self-regulation. That is, when scientific methods or findings appeared questionable or wrong, the scientific community would take steps to correct the record. The most important means available to support self-regulation are peer review, replication, and retraction, but the assumption that scientists are ethical researchers, trained in and committed to the scientific method and proper scientific procedures, is also important. From this perspective, actual scientific misconduct is presumed to be rare and produced by aberrant individuals whose conduct others find difficult to understand.

Indeed, this perspective was given voice by several presenters at the First World Conference on Research Integrity in Lisbon, Portugal, in 2007. Others at the Conference, however, had already taken a different view for some time. In some countries, egregious cases of misconduct had rocked the scientific community and had attracted intense and unwelcome attention on the part of government officials, law makers, funders, and, significantly, the press. In the face of scaring publicity, research leaders found the principles and methods of self-regulation to be weak defenses. Where scandals hit, affected institutions were forced to examine the specific misconduct and the circumstances surrounding it to find out what went wrong and how to restore trust in science. Reactions to specific cases of misconduct did not always benefit from others’ experience with scandal, and the resulting policies, procedures, oversight, and instructional strategies tended not to be aligned with those developed in other locations or with any general principles.

What was needed at this point was a way to get top policy makers, funders, institutional and government leaders, and the editors of major journals to take a broader perspective on the misconduct cases that were cropping up in country after country. Without the buy-in of major figures in research worldwide, there would be less momentum toward developing greater commonality of perspectives. Like the First World Conference, the Second (in Singapore, 2010) attracted many top officials from the various research sectors globally. What was also needed was some degree of consensus as to what research integrity and research misconduct entail. The Second World Conference produced a consensus document (World Conferences on Research Integrity, 2010) that set a global basis for subsequent policy development and related actions. This achievement raised the global discussion from endless consideration of fundamentals to consideration of a multitude of further questions and strategies.

By the Third and Fourth World Conferences (in Montréal, 2013, and Rio de Janeiro, 2015), it was important to incorporate further perspectives into the discussion, and so researchers in the field of research integrity, students and postdoctoral fellows, and people throughout the ranks of institutions and agencies joined top officials at the conferences, as well as delegates from a wider range of countries who were in charge of research integrity initiatives. By the time of the Montréal Conference, it was clear that serious problems were showing up in international research collaborations because of misaligned policies, rules, and expectations. The Conference yielded another consensus document to address concerns in that area (World Conferences on Research Integrity, 2013). By the time of the Rio Conference, attention was focused on systemic problems in research worldwide and their...
role in undermining integrity and possibly abetting misbehavior. These problems were linked to, among others, research funding structures and processes, unchecked competition among researchers and institutions, and unsustainable recruitment and placement pipelines for young researchers.

For the most recent and upcoming World Conferences (Amsterdam, 2017; Hong Kong, 2019), a substantial expansion of focus is represented by the range of topics under consideration. None of the earlier points of focus have been abandoned, but many have been added, including the replication crisis, new approaches to electronic detection of misconduct, predatory journals, the scope and efficacy of retractions, the role of media, rehabilitation of researchers found guilty of misconduct, behavioral economics in relation to misconduct, flaws in the peer review system, quality assurance in laboratory contexts, corruption, and calls for prior registration of research studies (World Conferences on Research Integrity, 2017). Many of these topics appeared on the programs of earlier conferences, but they have become conference subthemes as global attention has enhanced their relevance. The scope of topics has expanded further to industrial research, as well as to specific disciplinary and national contexts.

Self-regulation by the research community and its individual members is still an important aspect of science, but world perspectives on integrity and misconduct have shifted considerably in the past decade as the World Conferences on Research Integrity have witnessed and recorded. Conversely, the Conferences themselves have contributed to advancement in global attention to the critical importance of integrity in research, on which the public's trust and research institutions' perceived legitimacy depend. They have fostered discussion of both high-level policy and individual-level practicality; supported cross-national connections among attendees; and provided forums to bring together universities and journals, senior members of the field and young scholars, and those experienced in offering instruction in the responsible conduct of research and those just setting up such programs in their countries.

No individual, institution, or country has a broad enough perspective to solve the persistent dilemmas related to research integrity. Participating in multinational, consensus-seeking discussions of global integrity issues is an eye-opening and worthwhile experience.

Research integrity as an enterprise continues to be supplemented and informed by empirical research, just as the field of research ethics has evolved through empirical studies published in journals such as JERHRE. Such work complements and supports the development of guidance documents and policy. The international guidelines on research integrity that are emerging provide benchmarks against which past and current research practices can be empirically evaluated. Such data can inform future practices and policy evolution.

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