Understanding gender differences in science requires a diversity of perspectives, including controversial ones

Ludo Waltman
Editor-in-Chief of QSS

Improving gender diversity in science is a key priority for many research institutions, funding agencies, and scholarly societies. The issue also receives extensive attention in the scholarly literature, including in articles published in Quantitative Science Studies (QSS). For instance, of the 87 research articles published in QSS in 2020, eight mention gender-related questions in their title or abstract. These articles study the relation between the gender of researchers and issues such as authorship, citation impact, open access publishing, mobility, and acknowledgments.

The current issue of QSS includes the article “Gender issues in fundamental physics: A bibliometric analysis” by Alessandro Strumia. An earlier version of the analysis reported in this article was presented by Strumia at a workshop at CERN in 2018. This presentation caused a major controversy in the physics community and beyond (Castelvecchi, 2018).

Given this controversy, the decision to publish Strumia’s article has not been taken lightly. The article went through several rounds of in-depth peer review, which eventually led to a consensus among the reviewers and myself that the article is of sufficient quality and interest to be published in QSS. This does not mean that we were in full support of all conclusions drawn in the article. As is often the case in peer review, there were still reservations about the article, but we felt that this should not prevent the article from being published. Further discussion about the article can best take place publicly rather than in a closed peer review process.

As a starting point for such a public discussion, QSS solicited commentaries on Strumia’s article. This issue includes four commentaries and a rejoinder by Strumia. For others who may want to contribute to the discussion, QSS offers room for publishing short letters in one of the next issues of the journal.

The literature on gender differences in science is extensive. Many disciplines contribute to this literature and new results are being published almost on a daily basis. The issues addressed in the literature are highly complex, and each individual study can provide insight into only a small part of a very complicated puzzle. Like other articles published in QSS on this topic, Strumia’s article, along with the commentaries, will hopefully contribute to a better understanding of some pieces of the puzzle.

REFERENCE


1 Some requests were made to publish the review reports. However, in consultation with the reviewers, it has been decided not to publish the reports. The reports were prepared by the reviewers with the understanding that they will not be shared publicly, and publication of the reports may cause the identity of the reviewers to be revealed. QSS is currently running a transparent peer review pilot. For newly submitted articles, peer review reports will by default be made publicly available.