

ARTÍCULO - EXTENDED PAPER

GENDER IN THE EDITORIAL BOARDS OF SCIENTIFIC JOURNALS: A STUDY ON THE CURRENT STATE OF THE ART

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ABSTRACT

Gender issues have been studied in a broad range of fields and in many areas of society, including social relations, politics, labour, and also academia. However, gender in the membership of editorial boards of scientific journals is a topic that only recently has started to attract the attention of researchers, and there is little literature on this subject as of today.

The objective of this work is to present a study of the current state of editorial boards with regard to gender. The methodology is based on a literature review of gender issues in academia, and more specifically in the incipient field of gender in editorial boards.

The main findings of this work, according to the reviewed bibliography, are that women are underrepresented in academic institutions, that this underrepresentation is increasingly marked in higher rank positions in academia and in editorial boards, and that this carries the risk of narrowing the nature and scope of the research in some fields of knowledge.

RESUMEN

Un gran número de estudios se han ocupado de cuestiones de género en una amplia variedad de campos y en muchas áreas de la sociedad, entre ellas las relaciones sociales, la política, el trabajo, y también el mundo académico. Sin embargo, la cuestión del género entre los miembros de los comités editoriales de revistas científicas solamente ha empezado a recibir la atención de los investigadores en los últimos años, y a día de hoy todavía hay poca literatura sobre este tema.

El objetivo de este trabajo es presentar un estudio del estado actual de los comités



editoriales en relación al género. La metodología está basada en una revisión de la literatura sobre cuestiones de género en el ámbito académico, y más concretamente en el incipiente campo del género en los comités editoriales.

Los principales hallazgos de este trabajo, de acuerdo con la bibliografía revisada, son que las mujeres están infrarrepresentadas en las instituciones académicas, que esta infrarrepresentación es cada vez más acentuada en los puestos académicos de mayor rango y en los comités editoriales, y que esto conlleva el riesgo de restringir las características y el alcance de la investigación en muchos campos de conocimiento.

KEYWORDS

Gender in academia, scientific journal, editorial board.

PALABRAS CLAVE

Género en el ámbito académico, revista científica, comité editorial.

INTRODUCTION

Gender studies have been a concern for researchers for a long time. According to Hill et al. [1], there is a relation between the ancient archetype of men and women and what we see today as gender discrimination. In the modern era we witness an increasing participation of women in the social and political arena [2], but one still can consider the current status with doubt and call it into question.

The masculine approach toward society and the dominance of men in the public realm is patently obvious in many societies, especially in developing countries. Topaz and Sen [3] and Dhanani and Jones [4] believe that this trend has reproduced in new forms that are harder to recognise, harder to analyse and even harder to cure. The dominance of men extends to many social spheres, and this includes academia, which is the focus of the present study, and more specifically the editorial boards of scientific journals.

There is a large number of studies on gender in academia, however gender in the membership of editorial boards of scientific journals is a topic that only recently has started to attract the attention of researchers, and there is little literature on this subject as of today.

The interest of this study lies in the fact that editorial boards of scientific journals play



a key role in the academic life globally. They serve an important and effective role in the life of academic research because they make the policies that determine what is accepted for publication and what is not. Moreover since there is no monitoring on their functioning, the level of freedom in their activities provides them with a comfort zone in which no one can object to them [4].

Editorial boards have significant influence in the reproduction of knowledge because they choose the future direction of knowledge in their field. Furthermore, admission or rejection of articles has a direct impact on the academic career of their authors, either full professors or PhD students.

The rest of this work is structured as follows. The next two sections present the objectives and the methodology followed in this study. Then a review of the main works addressing gender in academia and gender in editorial boards is developed, and finally the conclusions of this study are drawn from the claims made in the reviewed bibliography.

OBJECTIVES

Gender in editorial boards of scientific journals is an issue that has attracted attention from several researchers in recent years, although most studies published so far focus on journals of a specific field of knowledge. This work aims at providing an overview of the academic works focused on various aspects of gender in academia, and in particular on the representation of women in the editorial boards of journals and the implications of this representation.

METHODOLOGY

The methodology in this study is based on a literature review of gender issues in the scholarly sphere. First, works dealing with women and academia in general are addressed, and then those works focusing on editorial boards are reviewed. The latter are less numerous as of today, since the study of gender in editorial boards is still an incipient field of research.

LITERATURE REVIEW

Many works published in the literature ascertain that the gender inequalities that are present in many aspects of society such as instruction, earnings and political participation [1, 5, 6], are unfortunately also present in academia. The number of male professors in comparison with female professors, the number of male authors in journals in comparison with the number of female authors, and many other



comparisons speak of male dominance in such realms.

According to Lincoln et al. [7], also the scientific efforts and achievements of women do not receive the same recognition as do those of men. Even the awards in the science, technology, engineering and mathematics fields (STEM) are not free from gender biases. While women's receipt of professional awards and prizes has increased in the past two decades, men continue to win a higher proportion of awards for scholarly research than expected based on their representation in the nomination pool. Furthermore, women's research is less likely to receive funding than men's [8].

Danell and Hjerm [9] state that the chances of women achieving professorships have hardly improved over the past 20 years, and according to Carter et al. [10], despite the similar productivity of men and women at the level of associated professor, men are still more likely to get promoted to full professorships.

Topaz and Sen [3] conclude that, in the field of mathematical sciences, women are grievously underrepresented at all levels in US higher education, as shown in Fig. 1. In this figure, the dotted, dashed and solid lines represent the time evolution of the proportion of women among bachelor's degree recipients, doctoral degree recipients and tenured research faculty respectively, in all fields (blue lines) and specifically in the mathematical sciences field (red lines). Limited data are available about faculty because the tenure status data have not been gathered until recent years.

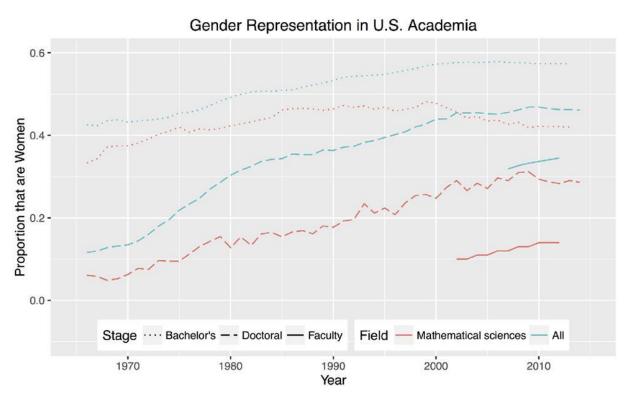




Figure 1: Representation of women at various levels of academia in the United States (source: [3])

According to Topaz and Sen, there are many historical barriers to women entering the workforce in old and modern societies, but also in the modern era there is a robust scholarly literature that tests the probable reasons of additional underrepresentation in science, technology, engineering and mathematics disciplines. Although the works by Parker and Guthrie [11] and Topaz and Sen [3] strongly show that males and females have similar academic capacity in these fields, the outcomes and articles published show that there is not equal share for male and females in publication.

Other works analyse the inequalities between women and men in academia. In a study done by the National Science Foundation and conducted by the American Association of University Women [1], it is stated that many complex, interacting factors contribute to underrepresentation of women, including: stereotypes about women's abilities; harsher self-assessment of scientific ability by women than by men; academic and professional climates that are dissatisfying to women; and unconscious bias. In this regard, another study by Leslie et al. [6] has shown that representation of women is lower in fields that public opinion believes in the importance of "talent" or "brilliance" to be the main indicators of success in those fields. Rhode and Packel [12] mentioned that gender stereotypes create further problems. Men continue to be rated higher than women on most of the qualities associated with leadership. People more readily credit men with leadership ability and more readily accept men as leaders. What is assertive in a man may seem abrasive in a woman, and female leaders risk seeming too feminine or not feminine enough.

With regard to editorial boards, the task they perform is also examined by several studies. According to Brinn and Jones [13], editorial boards serve a highly visible signaling function to the wider academic world. In determining what to be published and what not to be, according to their role, they help to determine the ranking of journals. Dhanani and Jones [4] express that editorial board quality is an important factor for journal selection in the most influential publication indices such as the Thomson ISI Index.

Cho et al. [14] confirm that women continue to be underrepresented in academic institutions, especially in higher ranks and decision-making bodies and in editorial boards. Parker and Guthrie [11] show that women have been of lower attention in editorial boards of different journals. In other words, the extent of masculine approach in society has its roots in editorial boards too.

In the research by Addis and Villa [15], the role of women acting as members of the editorial boards of journals or as gate keepers of science is analysed. The univocal



evidence is that women are underrepresented in editorial board of journals. Although Addis and Villa's study focuses on journals in the field of Economics, this evidence is confirmed by sectoral studies on journals in other fields such as Accounting [4], Mathematics [3], Management [16] or Science [17].

Dhanani and Jones's work [4] focuses on two aspects of editorial board membership: internationalism and gender diversity. They conclude that overall board trends appear to reflect both societal diversity and the value of diversity. Regarding gender, boards reflect the gender profile of senior academics. Further, female board representation has improved over time, is consistent across different countries, and "gendered" subdisciplines attract a relatively higher female board representation. However, inequities persist at the highest level: women are underrepresented as editors and on boards of higher ranked journals. Finally, editor gender plays an intervening role in the gender of boards.

Topaz and Sen's work [3] includes a study on gender representation on the editorial boards of 435 journals in the mathematical sciences. They assert that women are known to comprise approximately 15% of tenure-stream faculty positions in doctoral-granting mathematical sciences departments in the United States. Compared to this group, they find that 8.9% of the 13067 editorships in their study are held by women. They describe group variations within the editorships by identifying specific journals, subfields, publishers, and countries that significantly exceed or fall short of this average. To enable their study, they develop a semi-automated method for inferring gender that has an estimated accuracy of 97.5%. Their findings provide the first measure of gender distribution on editorial boards in the mathematical sciences, offer insights that suggest future studies in the mathematical sciences, and introduce new methods that enable large-scale studies of gender distribution in other fields.

Metz and Harzing's work [16] assesses women's representation in editorial boards in the field of Management over a 15-year period versus their representation as authors. The results of their research show that women continue to be underrepresented in editorial boards in relation to their representation as first authors of articles published in those journals. Three factors explain the underrepresentation of women in editorial boards: the field of study, the journal's prestige and the editor's gender. The persistent gender imbalance in the editorial boards of many Management journals in the last 15 years hinders women's ability to attain scholarly recognition and advancement, and carries the risk of narrowing the nature and scope of the research in this field. These conclusions can be extrapolated to many other fields of knowledge.

CONCLUSIONS

This study shows that gender in academia is an area of research that has received



substantial attention in many works, and most of them highlight the inequalities that still exist in this area between women and men. Various aspects have been analysed in these works, ranging from the representation of women in faculty staff to gender issues in the editorial boards of academic journals. This latter subject is of special interest given the influence these committees can wield in the course of published research, but has started to be examined only in recent years, and therefore less literature is available.

Although there are still few research works on the topic of gender in editorial boards, they all show a worrying trend of underrepresentation of women, and agree in the negative consequences for the advancement of science.

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