

A gender gap in scientific production: a bibliometric analysis of Journal of Soil and Water Conservation, 2001-2010



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ABSTRACT

The study was conducted to determine the presence of women in the Journal of Soil and Water Conservation (JSWC) through their scientific outputs in the form of journal publications. Bibliometric techniques and Web of Science were used to investigate the presence of women in the editorial board and publications in the Journal of Soil and Water Conservation from 2001-2010. Women scientists were identified by their first names using author information (name, academic degree, position, place of employment) on each of the publications. Ninety-one percent (31 out of 34) of the editorial board were men. Sixty-eight percent of male editors (21 out of 31) published from 1 to 25 articles of their own from 2001-2010. In contrast, only one out of the three female editors published her 2 articles during the same time period. The list of 100 most frequently published authors during this period indicated all male authors. One thousand publications were listed for the Journal of Soil and Water Conservation in the Web of Science in the period of 2001-2010. Journal articles from randomly selected years (2004, 2006, 2009, 2010, a total of 310 articles) were analyzed for presence of female authors. Fifteen percent of articles (48 out of 310) are led by females. Thirty-four percent of the articles (105 out of 310) are co-authored by females. The results show significant gender gap in the editorial board of the journal. There appears to be a leadership gap between genders with eighty five percent of the articles published by the journal led by male authors.

INTRODUCTION

Women have made progress in the workplace, but still get lower pay and far fewer well-paid jobs than men (The Economist, 2011).



Figure 1. Gender (in)equality statistics (The Economist, 2011. OECD = Organization for Economic Cooperation and Development (www.oecd.org).

OBJECTIVES

- To determine the presence of women in the Journal of Soil and Water Conservation through their scientific outputs in the form of journal publications.

MATERIALS AND METHODS

Web of Science

- Web of Science was used to identify articles published by Journal of Soil and Water Conservation (2001-2010).

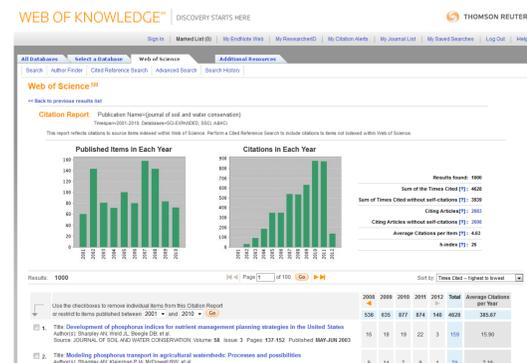


Figure 2. Screen capture of Web of Science for the journal articles (2001-2010).

Bibliometric Techniques

Women scientists were identified by their first names using author information: 1) Name; 2) Academic degree; 3) Position, and 4) Place of employment.

assessment gaps remain, including the following:
 • Comprehensive assessments of effects of grazing management on a broad range of private prairie models; address a range of the conservation issues related to and out technical management of these areas.
 There are a number of questions:
 1) (USE

Figure 3. Screen capture of the JSWC articles author information.

RESULTS AND DISCUSSIONS

Gender Gap Analysis

- There is a gender gap for 2001 with majority of articles authored by men (Fig. 4).

Proportion of articles authored by women, 2001

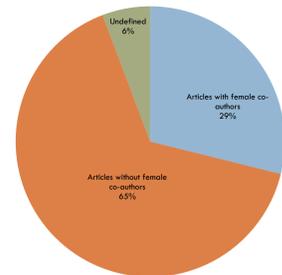


Figure 4. Gender statistics from the JSWC articles author information for 2001.

RESULTS AND DISCUSSION

Gender Gap Analysis

- Considering the total number of authors in 2001, 85% of them were man and 11% were women. Only one woman was a leading author (representing 1% of the authors) and she had Ph.D. degree (Fig. 5).

Proportion of women with Ph.D. Degree, 2001

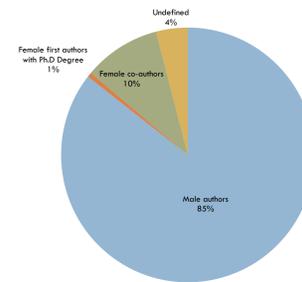


Figure 5. Proportion of female authors with a Ph.D. degree in 2001.

- There is a gender gap for 2006 with majority of articles authored by men (Fig. 6).

Proportion of articles authored by women, 2006

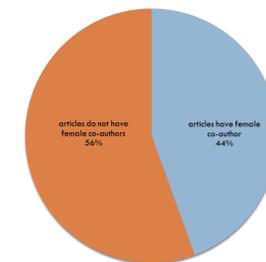


Figure 6. Gender statistics from the JSWC articles author information for 2006.

- Only 3% of women with a Ph.D. degree were leading authors (Fig. 7).

Proportion of women with Ph.D. degrees, 2006

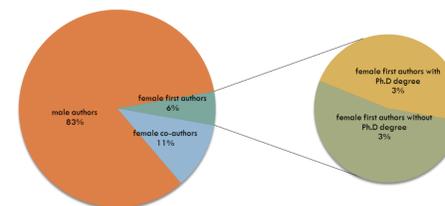


Figure 7. Proportion of female authors with a Ph.D. degree in 2006.

RESULTS AND DISCUSSION

Gender Gap Analysis

- There is a gender gap for 2010 with majority of articles authored by men (Fig. 8).

Proportion of articles authored by women, 2010

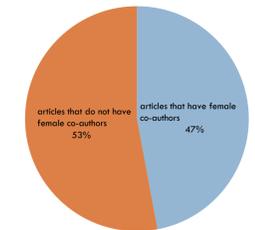


Figure 8. Gender statistics from the JSWC articles author information for 2010.

- Only 6% of women with a Ph.D. degree were leading authors (Fig. 9).

Proportion of women with Ph.D. degrees, 2010

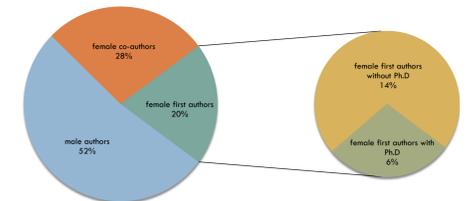


Figure 9. Proportion of female authors with a Ph.D. degree in 2010.

CONCLUSIONS

- There is a gender gap in scientific production in the JSWC.
- Journal of Soil and Water Conservation does not have any published editorial policy and ethics code, and therefore does not have any written policy regarding gender discrimination.

ACKNOWLEDGEMENTS

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REFERENCES

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- The Economist. 2011. Special Report: Women and Work., Closing the Gap. November 26th, pp. 3-8.