EPSC Abstracts
Vol. 18, EPSC-DPS2025-28, 2025, updated on 17 May 2026
https://doi.org/10.5194/epsc-dps2025-28
EPSC-DPS Joint Meeting 2025

Thoughts on Changing Our Demographics

Jarita Holbrook[1,2,3]
[1]Harvard Smithsonian Center for Astrophysics, United States of America (jarita.holbrook@cfa.harvard.edu)
[2]Physics & Astronomy, University of the Western Cape, South Africa
[3]Science, Technology & Innovation Studies, University of Edinburgh, United Kingdom

The 2020 Demographic Survey of the Division of Planetary Science of the American Astronomical Society[1] shows that women are 32% of their membership. In terms of ethnic diversity, 10% were Asian or Asian American and 8 % were all other ethnicities. These percentages are slightly different from the broader workforce survey which includes non-members: 37% women, 13% Asian or Asian American and 11% all other ethnicities with 6% of these declaring more than one ethnicity. For the USA, the percentage of women and all other ethnicities are below the national values. The International Astronomical Union has 2843 members as part of their Division F Planetary Systems and Astrobiology, their membership is drawn from all over the world[2]. Doing a quick estimate of Division F members, I found 17% women, which if it is a good estimate is below the IAU average of 21% women[3]. The effort to increase the diversity in STEM has been ongoing and for some cases for over 40 years without success. Many of the social sciences and some of the natural sciences were able to reach gender parity (see Figure 1 for the United Kingdom), but the fields of planetary science and astrophysics have failed in spite of their repeated efforts (last two columns for Figure 1). In this presentation, I will consider several factors that might aid in positively changing these demographics. Unconsidered factors that may be hindering diversification could be definitions Indigeneity and the migration of scientists. Depending upon the country, scientists may not originate from the town or region, the country or even the continent where they are employed. For example, at the University of Edinburgh, the astrophysicists and astrobiologists are comprised of academic migrants with only a handful of scientists from Scotland and none from Edinburgh. Most departments are in agreement about increasing diversity when it applies to women, but may have conflicting ideas about and resistance to increasing specific types of ethnic/racial diversity. This might be due to migrant and local scientists holding different ideas about Indigeneity, that is different ideas of who are considered Indigenous and who are the local target populations. It is possible to quantify resistance to change by using field tested surveys designed to measure resistance to change and the level of happiness/contentment with the status quo. When conducting a survey, it cannot be too long and it has to be appropriate for your population of study. I will discuss three surveys that I think are appropriate to use. When strategizing on which actions to take to increase diversity, it is important to know what has been done in the past and if it was successful or not. This seems like a basic idea, but such previous department knowledge may have been lost as scientists circulate through and retire. Summarizing, I will discuss Indigeneity, the migration of scientists, noting previous efforts and potential surveys, with the goal of aiding in positively changing the demographics of planetary scientists and related STEM disciplines.

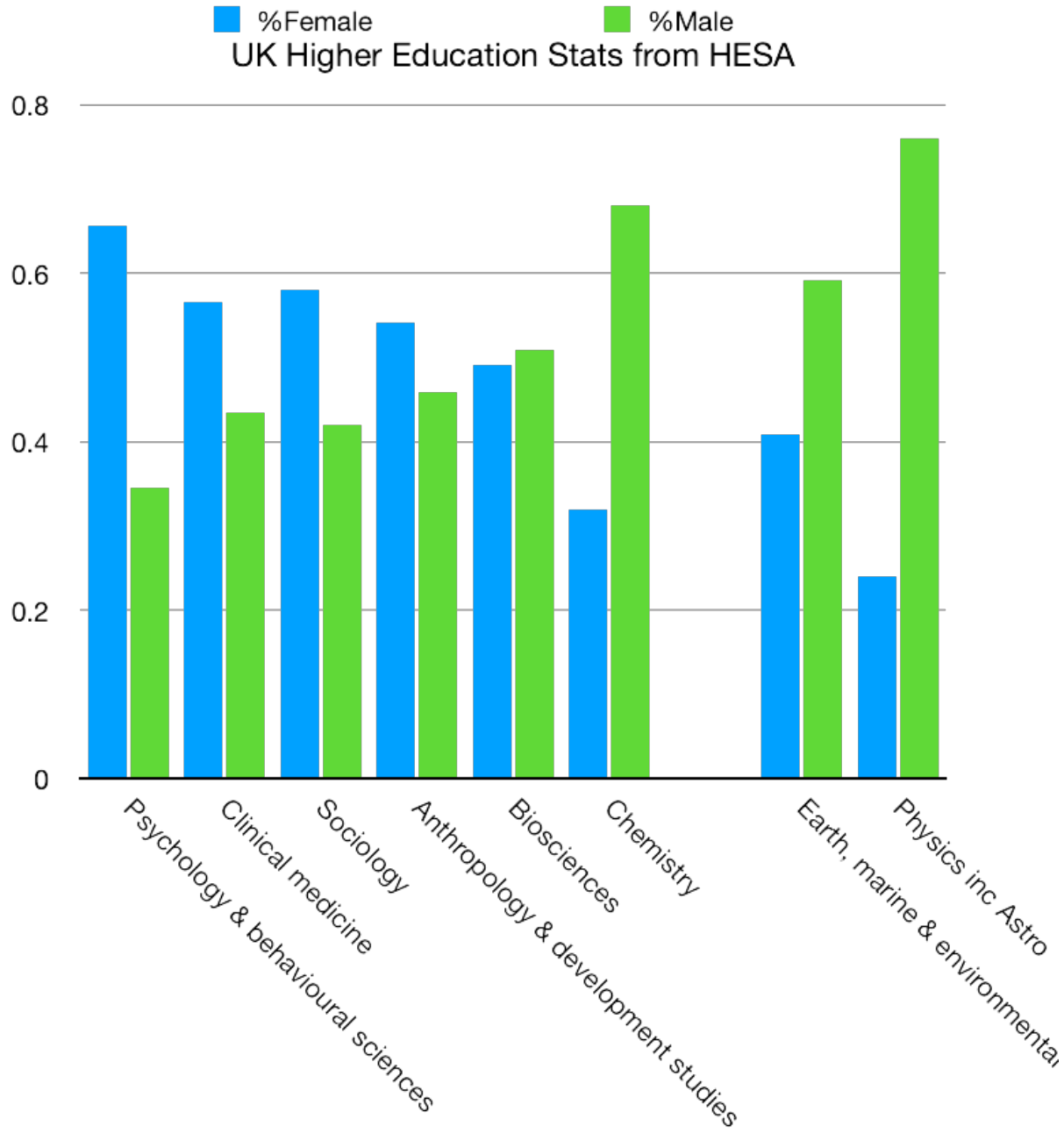

Figure 1: United Kingdom Higher Education Statistics by Subject[4] Academic Year 2023/2024

- Porter, A. M., Susan White, & Julius Dollison. *2020 Survey of the Planetary Science Workforce*. 26 https://dps.aas.org/wp-content/uploads/files/reports/2020/Results_from_the_2020_Survey_of_the_Planetary_Science_Workforce.pdf (2020).
- IAU Division F: Structure. https://www.iau.org/DivisionF/DivisionF/Structure.aspx?code=F.
- Hasan, P. *et al.* THE IAU-WOMEN IN ASTRONOMY WORKING GROUP AND INCLUSIVITY. *2nd Workshop Astron. Common Senses Access. Incl. Rev. Mex. Astron. Astrofís. Ser. Conf.* **54**, 129–132 (2022).
- the Higher Education Statistics Agency,. What areas do they work in? HESA.

https://www.hesa.ac.uk/data-and-analysis/staff/areas.