

Recommendations from the CSWA Survey on Workplace Climate

This white paper is submitted as part of a collaborative effort organized by the Equity, Diversity, and Inclusion Working Group (EDIWG), a cross Assessment Group (AG) committee.

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Introduction:

In planetary science, the dominant lived experience & cultural constructions (including power & influence) of the field are white, cisgender male, & straight. The majority of scientists holding positions of leadership, influence, or rank in planetary sciences do not hold minority identities. This white paper looks at the results from the American Astronomical Society Committee on the Status of Women in Astronomy (CSWA) Workplace Climate Survey, an internet-based survey of the workplace experiences of 474 astronomers & planetary scientists between 2011 & 2015. This white paper summarizes the methodology of the research, the results from both publications, and highlights the recommendations from each paper. The recommendations cover topics highly applicable to Task #9 of the Planetary Science and Astrobiology Decadal Survey 2023-2032

(<https://www.nationalacademies.org/our-work/planetary-science-and-astrobiology-decadal-survey-2023-2032>): “The state of the profession including issues of diversity, inclusion, equity, and accessibility, the creation of safe workspaces, and recommended policies and practices to improve the state of the profession.”

Methodology:

This research was conducted under the oversight of the University of Illinois Institutional Review Board (protocol #15354). The survey was administered electronically on the Survey Monkey website from 5 January to 15 March 2015. To obtain informed consent, the front page of the online survey informed research participants about the study and continuing past the front page to complete the survey signified consent. We recruited participants through multiple outlets in the planetary science and astronomical science community, and additional details can be found in Clancy et al., 2017.

Summarized Results: Paper #1: Clancy, K. B. H., K. M. N. Lee, E. M. Rodgers, and C. Richey (2017), *Double jeopardy in astronomy and planetary science: Women of color face greater risks of gendered and racial harassment*, *J. Geophys. Res. Planets*, **122**, 1610–1623, doi:10.1002/2017JE005256.

In nearly every significant finding, women of color (as defined within the paper referenced) experienced the highest rates of negative workplace experiences, including harassment and assault. Further, women of color reported feeling unsafe in the workplace as a result of their gender or sex 40% of the time, and as a result of their race 28% of the time. Finally, 18% of women of color, and 12% of white women, skipped professional events because they did not feel safe attending, identifying a significant loss of career opportunities due to a hostile climate.

Our results suggest that certain community members may be at additional risk of hostile workplace experiences due to their gender, race, or both.

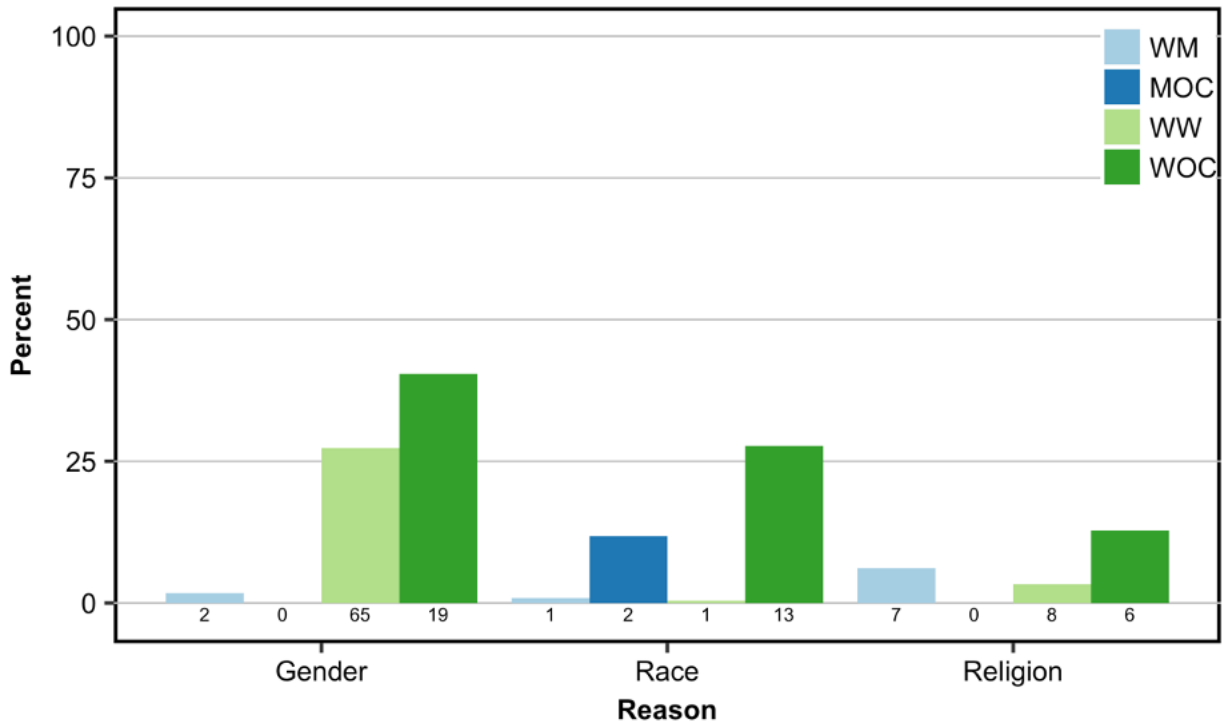


Figure 1: From Clancy et al., 2017: A significant difference exists in the percent of individuals in each category who have felt unsafe at their current position due to gender ($p < 0.001$) and race ($p < 0.001$), and there is a trend toward differential experiences with feeling unsafe due to religion or lack thereof ($p = 0.069$). Light blue is white men (WM), dark blue is men of color (MOC), light green is white women (WW), and dark green is women of color (WOC). Numbers at the bottom are the raw count for each category.

Recommendations from Clancy et al. 2017:

Norman et al. [2013], Cortina et al. [2013], and Clancy et al. [2014] suggest solutions to the hostile workplace climate faced by women of color, men of color, and white women. These solutions are multilevel, and no one solution alone will sufficiently improve the hostile workplace climate.

1. A code of conduct or other education on appropriate work behavior should be required of all trainees and employees at all levels [Clancy et al., 2014; Cortina et al., 2013].
2. Diversity and cultural awareness training is necessary to raise awareness and understanding of the problems faced by women of color and other underrepresented groups [Norman et al., 2013]. This training should include interpersonal skills training in

order to help scientists understand expectations of appropriate behavior toward others [Cortina et al., 2013].

3. Leaders in the discipline and in individual programs need to model appropriate behavior and define an inclusive, equitable culture for their workplaces, disciplines, and professional societies [Clancy et al., 2014; Cortina et al., 2013 Settles et al., 2006].
4. When abuses are reported, “instigators should be swiftly, justly, and consistently sanctioned” [Cortina et al., 2013, p. 1600] as this is the only way to signal consequences to the target and the broader community.
5. Norman et al. also point out several important initiatives to increase numbers for women of color, which should also help lessen the hostile workplace climate: build cohorts of women of color graduate students to enable the creation of peer networks; encourage fair hiring practices to minimize implicit bias; and, incentivize departments and individuals who support women of color [Norman et al., 2013].

Summarized Results: Paper #2: Richey, C. R., Lee, K. M. N., Rodgers, E., & Clancy, K. B. H. (2020). Gender and sexual minorities in astronomy and planetary science face increased risks of harassment and assault. *Bulletin of the AAS*, 51(4). Retrieved from <https://baas.aas.org/pub/2019i0206>

Lesbian, gay, bisexual, transgender, queer, pansexual, asexual, & nonbinary (LGBTQPAN, as defined within the paper referenced) women & gender minorities in this sample reported a high rate of observing negative remarks, as well as directly experiencing verbal harassment & physical harassment in their astronomy & planetary science workplaces. LGBTQPAN women and gender minorities were more likely to feel unsafe due to their race (12% for LGBTQPAN women and gender minorities vs 4% for cis, straight women), sexual orientation (10% for LGBTQPAN women and gender minorities vs 0% for cis, straight women), and gender identity (14% for LGBTQPAN women and gender minorities vs 0% for cis, straight women). Not only did LGBTQPAN women & gender minorities observe more homophobic & transphobic remarks than their cisgender, straight female peers, they were more likely to feel unsafe at work due to their race, sexual orientation, & gender identity. They were more likely to be verbally harassed due to sexual orientation & gender identity.

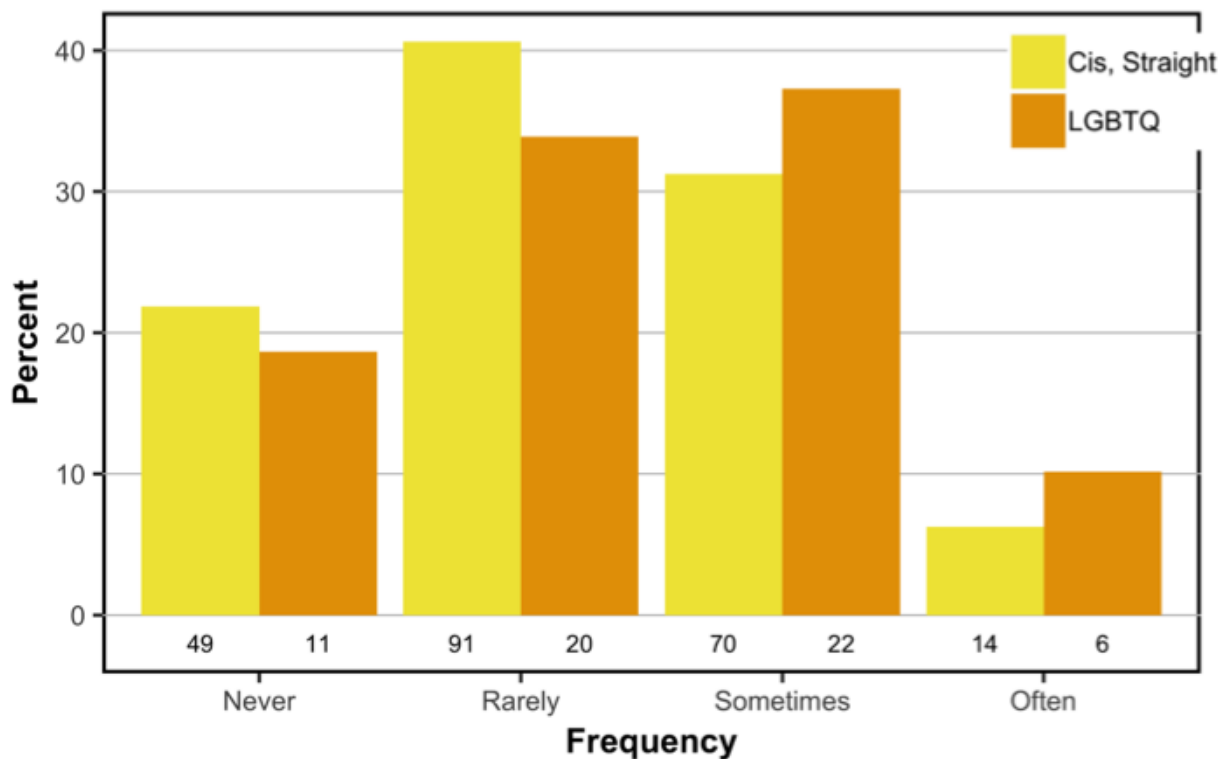


Figure 2: From Richey et al., 2019: The Frequency of hearing sexist remarks from peers in the workplace. Only cis, straight women and LGBTQPAN women and gender minorities are included in this graph.

Recommendations from Richey et al. 2019:

As with our previous paper on this data set [Clancy et al., 2017], the recent APS LGBT+ best practices report [Ackerman et al., 2018], and the National Academies of Science, Engineering, and Medicine (2018) report on sexual harassment, we seek not only to highlight a problem but also to provide a path toward a more inclusive and equitable scientific community. The research strongly indicates that:

1. The leadership of departments and professional societies need to prioritize the sexual and psychological safety of all their workers. They need to clearly communicate and provide incentives and rewards to motivate culture change.
2. Institutions should conduct climate surveys that employ subject matter experts, not just survey method experts. They should swiftly address issues revealed by these assessments but also recognize that there are actions they can take, today, to lessen the impact of a hostile work environment on their LGBTQPAN colleagues and their allies.
3. Institutions should develop codes of conduct with clear language about what constitutes appropriate professional behavior. There should be swift sanctions for transgressions of

behavior graded to the severity of the issue (e.g., a conversation with one's boss, additional training, probation, demotion, or termination).

4. Institutions should consider restorative capacity building practices to develop bystander intervention skills in all workers, a sense of responsibility for the culture and climate of the institution at all levels, including at the top, and informal practices to encourage conversation and "calling in" where relevant. Institutions can also educate the astronomy and planetary science workforce through perspective-taking trainings to inform the broader community on the lived experience of being LGBTQPAN.
5. Institutions should work to identify and support LGBTQPAN networking opportunities, allies, and initiate a discussion of LGBTQPAN workplace concerns.
6. Institutions should ensure equal access to bathroom facilities for all genders.
7. Institutions should encourage practices of sharing gender pronouns and using preferred gender pronouns.
8. Institutions should require all research partners to have inclusive LGBTQPAN policies. Travel considerations for LGBTQPAN individuals should be explicitly considered by conference organizers, field school program directors, and observatory directors, rather than existing as an extra burden or barrier for LGBTQPAN members of the community.
9. In addition to encouraging institutions to take the above actions, individuals in astronomy and planetary science can all work to set better examples and expectations for professional behavior. Allies and advocates need to practice inclusive workplace behavior, and be willing to hear criticism and improve. Leaders in the field need to model appropriate behavior and define an inclusive and equitable culture in their workplaces, disciplines, and professional societies [Clancy et al., 2014; Cortina et al. 2013; Settles et al., 2006]. Allies should engage in dialog regarding preferred pronouns through respectful discourse and email signature annunciation [Grant et al., 2011; Ackerman et al., 2018].

Many of the above recommendations reflect the kinds of inclusive workplaces that reduce rude and contemptuous behaviors and many types of identity-based harassment broadly, and frankly create a more enjoyable workplace for people of all identities. Inclusive workplaces are ones that are more equitable, friendly, and in the end, more productive and innovative. Astronomy and planetary science are disciplines already starting to be attuned to these issues, with grassroots efforts like the Inclusive Astronomy Conferences held in 2015 and 2019, The Mitigating Harassment in Planetary Science Workshop held in 2020, and creation of groups like Astronomy Allies, as well as the professional society efforts one by AGU (through their [Ethics and Equity Center](#)) and AAS (through their [Diversity and inclusion Task force](#)). These efforts and their leaders deserve more structural support from their departments, professional societies, and federal agencies to see positive change. Note, many of the recommendations above are also listed in other other DEIA (Diversity, Equity, Inclusion, and Accessibility) White Papers being

submitted to the State of the Profession deadline, and emphasize the need for “specific, actionable and practical recommendations to the agencies and community to address these areas,” as requested in Task #9 of the Planetary Science and Astrobiology Decadal Survey 2023-2032.

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