

Name of Project	Gender Equity in HDR Confirmation of Candidature
Chief Investigator	Connar McShane
College/Institute/Directorate	Healthcare Sciences
Project Funding	\$10,000

Relevance to JCU's gender equity priorities.

This project supports JCU's Gender Equity commitment by addressing the attrition of women across the academic career pipeline. It contributes to this goal by identifying potential gender biases in the evaluation of early career researchers and highlighting how gendered performance expectations shape the broader academic culture. This project contributes to the broader JCU strategic pillar of 'Empowering Our People' by identifying a potential systematic inequality in HDR student experiences of university processes (i.e. candidature milestones). This project also aligns with the JCU value of integrity – by ensuring that all candidates are subject to similar expectations and are assessed fairly during milestones regardless of gender. It contributes to an inclusive learning and research environment and ensures that institutional structures do not hinder the progression of any group. While no research project is the same, investigating experiences of candidature milestones by gender will ensure equity in university assessment processes and reflects a commitment to inclusive academic practice. The research contributes to the university's reputation for excellence by producing evidence-based insights and a potential novel contribution of JCU to the scholarship of gender equity in candidature milestones.

Objectives

Research indicates that women face gender bias at all stages of academic career. However comparatively little is known about gender bias during evaluation of HDR candidature. HDR candidature marks the beginning of a career in academia and sets the tone and expectations people have for their future experiences. This project proposes to investigate gender equity in JCU HDR confirmation of candidature milestones (CoC).

This project aims to assess:

- 1) The effect of candidate gender on quantitative and qualitative markers of gender equity
- 2) The effect of panel gender on the interaction with the candidate
- 3) Whether there is a difference between colleges on gendered evaluations of performance

The project will use de-identified Confirmation of Candidature assessment forms and video recordings, and AI technology.

Given the high attrition rate of candidates and the difficulty in retaining, recruiting and promoting women into senior academic positions – this project will assist in identifying potential gender bias at an early and important career milestone stage (CoC).

Literature Review

A similar project, examining doctoral experiences in milestone evaluations, could not be found. Another Australian university with a gender equity project fund (Western Sydney University), also does not show this type of research. Though previous gender equity projects at WSU did describe barriers to progression in HDR candidates because of caring responsibilities (Smith et al 2021). There is also a lack of reference to gender equity in milestone and progression policies in Australia (including JCU). Victoria University was the only education provider that specifically states in their milestone guidelines that consideration should be given to diversity in composition of the panel. This is also a

common recommendation and action in increasing gender equity in academic promotions processes and recruitment panels (for example Universities Australia Gender Equity Toolkit- Hamilton et al 2022).

Pertinent research that may inform the methodology of this project can be particularly drawn from analysis and investigation of gender equity in conference proceedings. For example, audio transcriptions of questions during medical conferences have been used to demonstrate that gender is a significant factor in experiences of women at conferences (Salem et al 2021). Other analysis of live Q&A recordings found that men spoke more during question time and women are much more likely to fear backlash asking and answering questions (Jarvis et al 2022).

This project aims to assess the extent of the 'chilly climate' that might surround candidature milestones. A chilly climate was a term coined to encompass the overt or subtle ways men and women might be treated differently within institutions that contributes to a general unwelcoming atmosphere (Hall and Sandler 1982). Candidature milestones are reflections of wider institutional norms and cultures and experiences of sexism at these sorts of events are predictors of whether a woman might want to leave academia (Biggs et al 2018). Differences in level of professional support, mentoring and resource provision between men and women were seen to create a general unfavorable departmental climate (Greene et al 2010). Academic staff often have different expectations of women and men and respond differently to them in academic settings (Janz and Pyke 2000). This might take the form of assumptions of incompetence, making sexist remarks or requiring a female student outperform a male one in order to be taken seriously (Palmgren et al 2012). This might manifest itself in addressing women in a less polite way when asking questions (Jarvis et al 2022). The way in which language is used can either be empowering or enforce gendered stereotypes (Hassan and Zahid 2024). It might be direct use of language or interactional patterns which contribute to creating a chilly climate for women (Lee and McCabe 2020). The persistence of a 'chilly climate' despite increasing parity in undergraduate and post graduate completions is one of the reasons given for the stall in progress towards gender equity in higher education institutions (Lee and McCabe 2020). It is therefore important to identify whether an unfavorable or unwelcome atmosphere exists in candidature milestones so that recommendations can be put in place. These may take the form of resilience training, social cohesion initiatives, education/training about the forms this differential treatment can take or developing supports for female students (Sandler et al 1996, Walton et al 2015).

Asr FT, Mazraeh M, Lopes A, Gautam V, Gonzales J, Rao P, et al. (2021) The Gender Gap Tracker: Using Natural Language Processing to measure gender bias in media. PLoS ONE 16(1): e0245533. <https://doi.org/10.1371/journal.pone.0245533>

Babcock, L., Recalde, M. P., Vesterlund, L., & Weingart, L. (2017). Gender differences in accepting and receiving requests for tasks with low promotability. The American Economic Review, 107(3), 714–747. <https://doi.org/10.1257/aer.20141734>

Bendels, M. H. K., Müller, R., Brueggmann, D., & Groneberg, D. A. (2018). Gender disparities in high-quality research revealed by Nature Index journals. PloS One, 13(1), e0189136–e0189136. <https://doi.org/10.1371/journal.pone.0189136>

Biggs, J., Hawley, P. H., & Biernat, M. (2018). The academic conference as a chilly climate for women: Effects of gender representation on experiences of sexism, coping responses, and career intentions. Sex Roles, 78(5-6), 394-408. doi:<https://doi.org/10.1007/s11199-017-0800-9>

Bol, T. (2023). Gender inequality in cum laude distinctions for PhD students. Scientific Reports, 13(1), 20267–20267. <https://doi.org/10.1038/s41598-023-46375-7>

Feldon, D. F., Peugh, J., Maher, M. A., Roksa, J., & Tofel-Grehl, C. (2017). Time-to-Credit Gender Inequities of First-Year PhD Students in the Biological Sciences. CBE Life Sciences Education, 16(1), ar4-. <https://doi.org/10.1187/cbe.16-08-0237>

Glorieux, A., Spruyt, B., Minnen, J., & van Tienoven, T. P. (2025). Calling it quits: a longitudinal study of factors associated with dropout among doctoral students. Studies in Continuing Education, 47(1), 155–173. <https://doi.org/10.1080/0158037X.2024.2314694>

Greene, J., Stockard, J., Lewis, P., and Richmond G. (2010) Is the Academic Climate Chilly? The Views of Women Academic Chemists. Journal of Chemical Education 87 (4), 381-385 DOI: 10.1021/ed800042z

Hall, R. M., & Sandler, B. R. (1982). The Classroom Climate: A Chilly One for Women?. <https://eric.ed.gov/?id=ED215628>

Hamilton, L., Elliott, D., Quick, A., Smith, S., & Choplin, V. (2023). Exploring the Use of AI in Qualitative Analysis: A Comparative Study of Guaranteed Income Data. International Journal of Qualitative Methods, 22. <https://doi.org/10.1177/16094069231201504> (Original work published 2023)

Hamilton, M; Williams, A; Baird, M (2022) Gender Equity and Inclusion by Design: A Toolkit for the Australian University Sector. Universities Australia Women: Canberra. <https://universitiesaustralia.edu.au/wp-content/uploads/2023/02/UA-2023-004-Gender-Equity-Toolkit-web-FA.pdf>

Holman, L., Stuart-Fox, D., & Hauser, C. E. (2018). The gender gap in science: How long until women are equally represented? PLoS Biology, 16(4), e2004956-. <https://doi.org/10.1371/journal.pbio/2004956>

Harris, R., Mate-Sanchez-Val, M., & Ruiz Marín, M. (2024). Gender disparities in promotions and exiting in UK Russell Group universities. Applied Economics, 1–17. <https://doi.org/10.1080/00036846.2024.2361384>

Research Team
<p>Connar McShane</p> <p>Connar is a Senior Lecturer in Psychology at JCU and also serves on JCU's GEAR committee. Connar has expertise in: qualitative research including thematic content coding; quantitative research and analysis including regression or between-group analyses (relevant to project); expertise in research and theories of social identities and bias. Connar's role in this project is as project manager and supervisor. The key aim of Connar's role is to mentor and support capacity building for Sophie as an ECR.</p> <p>Sophie Walker</p> <p>Sophie Walker is an environmental social scientist currently completing her PhD at JCU (conferral expected July 2025) with experience in quantitative and qualitative social research methods. She is also a member of the JCU Respect team and serves on JCU's Gender Equity Action and Research committee. Sophie's role in the project will be to take on the Research Assistant role and undertake the core research activities under the supervision and guidance of Connar.</p>