International Journal of Gender, Science and Technology
http://genderandset.open.ac.uk

Effectiveness of an undergraduate leadership conference in building leadership capabilities of women and non-binary students

Tegan Clark[1], Marissa Ellis[2] and Merryn McKinnon[3]

Australian National University, Canberra
[1]Fenner School of Environment and Society
[2]College of Health and Medicine
[3]Centre for the Public Awareness of Science

ABSTRACT
The *ANU Women* in STEM Leadership Conference*[1], established in 2021, is an annual program that aims to help undergraduate STEM students at the Australian National University (ANU) build their leadership skills, gain networking opportunities and form a stronger community of support. This case study presents an evaluation of the impact of the Conference across two years of attendees, using both interviews and surveys. We show that outcomes for participants primarily fall within three areas: networks and connections, resources and information, and leadership and capacity building. Immediately following conference participation, participants showed increases in connection within the STEM community, greater understanding of future pathways available to them and confidence in themselves as STEM students and leaders. Through evaluation of the Conference, we identify lessons learnt regarding the organisation, design and facilitation of the event to ensure longevity of participant outcomes. These findings are also intended to inform the implementation of other gender equity events within the tertiary sector.

KEYWORDS
leadership; conference; higher education; gender diversity; evaluation

[1] The * refers to the conference being open to women, femme and non-binary people.

Effectiveness of an undergraduate leadership conference in building leadership capabilities of women and non-binary students

INTRODUCTION

Although there is a large volume of practical and theoretical work devoted to identifying the need to support women in science, technology, engineering and mathematics (STEM) studies, comparatively little attention has been devoted to collecting evidence of what is effective, for whom, and how. This case study presents the impact of a tertiary-based leadership conference for female identifying and non-binary undergraduate STEM students at an Australian university. The findings are intended to assist other universities or student-focussed associations to develop similar activities informed by best practice and our 'lessons learned'.

LITERATURE REVIEW

Studying at university and entering the workforce are crucial periods for the retention of women in science (Pell, 1996). For many women, they have already overcome the gender bias and stereotypes that they can start to experience as early in their schooling as kindergarten (Bian et al., 2017; Cimpian et al., 2016). These stereotypes and biases can influence perceptions of which gender is 'better' at maths and science based on ability – despite there being no difference in ability between genders (O'Dea et al., 2018) – and personality traits; stereotypical masculine norms of rationality and objectivity seen as consistent with being a 'good' scientist (Settles et al., 2016; White, 2015). These stereotypes persist, with even women working within science perceiving it as a masculine field (Smyth & Nosek, 2015). The impacts of these gender biases and stereotypes are magnified for women of colour (Clancy et al., 2017) and non-binary individuals (Konik & Cortina, 2008), and manifest throughout all career stages, creating what has been termed a 'glass obstacle course' (De Welde & Laursen, 2011) or 'labyrinth' (Eagly & Carli, 2007) that women must navigate and which can prevent them from rising to leadership positions (De Welde & Laursen, 2011).

STEM focused workplaces are historically male-dominated (National Academies of Sciences, Engineering, and Medicine, 2018), especially in Western developed nations, and Australia is no exception (Carey, 2023). In 1995, the then Minister of Science established an advisory group in an attempt to improve recruitment and retention of women to careers in these fields (Women in Science Engineering & Technology Advisory Group, 1995). In subsequent years there have been other national initiatives such as the National Innovation and Science Agenda which specifically identified the need to attract and retain more women to STEM studies and careers (Commonwealth of Australia, 2015) and the Decadal Plan for Women in STEM developed by the Australian Academy of Science (2019). While meaningful progress towards equity in the Australian STEM workforce is slow, it appears that attracting women to STEM studies at least has been successful, with 52% of students enrolled in natural and physical science tertiary qualifications identifying as women (Australian Government, 2023a). This varies between disciplines, and within higher research and education roles, women hold just 22% of senior academic positions (Australian

Government, 2023b). The higher education context in Australia provides a snapshot of where gender disparities are easily observed. It also provides a setting where progress could be made towards addressing them.

There are numerous challenges associated with gender equity initiatives, both broadly and in universities. Broadly, although there is a great deal of literature which details the barriers, needs and opportunities to address systemic, gender-based inequities, meaningful evaluation of programs for addressing them is less prevalent, leading to people using 'best guesses' rather than 'best practice' (Kalev, Dobbin & Kelly, 2006). Within the university context, ongoing financial support for gender equity initiatives aimed at recruitment and retention of underrepresented students in STEM may be hindered by limited resourcing (Rincon & George-Jackson, 2016). This limits their ability to both run and evaluate the effectiveness of their programs, which in turn limits the evidence that can be collected to demonstrate program effectiveness – often required by management to justify additional investment - and thus further hinders their ability to gain ongoing support (Sadler et al., 2018). What little evaluation is conducted tends to focus on delivery rather than impact, illustrated both in Australia (Sadler et al., 2018) and in Europe (Müller et al., 2011). That is if evaluation is attempted at all. In a study reviewing over 330 gender equity initiatives in Australia, only seven had publicly facing evaluation data of which one went beyond self-reported factors such as 'enjoyment' (McKinnon, 2022). This case study aims to address this gap by presenting an evaluation of a leadership conference for undergraduate female-identifying and non-binary STEM students.

ANU WOMEN* IN STEM LEADERSHIP CONFERENCE

The ANU (Australian National University) Women* in STEM Leadership Conference (hereafter Conference) is an annual, two-day event aimed at female-identifying and non-binary undergraduate STEM students at the ANU. Established in 2021, the Conference was founded by a student based on her own experiences in STEM and run by a group of student volunteers. The Conference seeks to help students develop their leadership skills, network for opportunities, and more broadly facilitate community. A range of workshops and talks are delivered during the Conference, each targeting one or more of the identified Conference goals. As far as possible, the Conference was structured using evidence-based approaches. For example, in a review of STEM mentoring programs, Beck and colleagues (2021) found that programs which support "…professional networking, goal setting and tools for work-life balance" (p.7) were helpful to overcome barriers within academic institutions such as lack of guidance about study and career pathways. Thus, sessions included guided discussions, interactive workshops, networking and coaching - including small group mentoring as part of an academic afternoon tea - exploring topics such as imposter syndrome, work/life balance, career planning and leadership. Mondisa et al. (2021) provide a STEM mentoring ecosystem framework which maps all potential mentoring relationships that can occur: peer-to-peer mentoring, staff-to-student, external professional-to-student.

Sessions within the Conference aimed to help make these connections for participants on:

- a peer-to-peer level through meeting other participants and through organised social sessions
- an early-stage-to-late-stage STEM student level through meeting other students at later stages of study through the range of student participants
- a staff-to-student level through meeting academics from STEM fields within the university at the academic mentoring afternoon tea and professional university staff through the organised workshops
- an external professional-to-student level through the STEM in the community panel.

A detailed overview of the Conference program is provided in Appendix A.

There were 25 participants in 2021 and 65 in 2022, the increase supported by additional sponsors. Participants were predominantly studying science degrees (58), computer science and engineering degrees (18) or double degrees in both (10) with a small number of participants studying health and medicine degrees (4). Most participants were in the first two years of their degree.

METHODS

Ethics approval for this study was given by the Australian National University Human Research Ethics Committee (2022/043). All participants from both 2021 and 2022 Conferences were invited to participate in the study. Participants in the 2022 Conference were invited to participate in a study spanning six months, combining pre-/post surveys and an interview. Participants from 2021 were invited to complete a single survey, to explore whether the Conference had any ongoing influence 12 months after participation.

Survey procedure and analysis

Survey participants who attended the 2022 Conference were asked to complete three surveys: (1) pre-conference, (2) immediately post-conference and (3) 6-months post-conference. Responses were matched using identifiers provided and only known by participants, for example, their mothers' initials and the last three digits of their phone number. Although ideal, participants did not need to participate in all three surveys. Survey participants from the 2021 Conference were asked to complete a survey 12 months after attending the Conference; their surveys were not matched. Surveys were a mix of closed and open-ended response questions and sought to explore participants' understanding of, and confidence in, their abilities and opportunities; the most and least useful aspects of the Conference; whether the Conference caused them to change their belief or practice in some way, and if so, what they perceive as the biggest barriers and enablers to supporting this change.

Interview procedure and analysis

Interviews were conducted with participants of the 2022 Conference within the two weeks following the Conference. A set of pre-defined questions were asked to all interviewees, exploring their motivation for participating in the Conference, what they felt they gained from the Conference in terms of networks, perspective, skills and resources, and whether the Conference met their expectations. Where appropriate, follow up questions were asked to have participants to elaborate on answers. Interviews were transcribed and qualitatively examined using thematic analysis.

Initial coding was done on 50% of the samples, by the first two authors, using a combined inductive (based on the themes within the conference aims, and those identified in surveys) and deductive approach. An initial codebook was created and any discrepancies in coding were discussed and resolved. After consolidating the final codebook, reanalysis was conducted on all interview transcripts to ensure consistency.

RESULTS/DISCUSSION

Participation in analysis and broad thematic results

All conference participants were invited to contribute but, as is common with repeat survey studies (Catalogue of Bias Collaboration et al., 2017), not all participants elected to respond and of those who did, numbers declined over time. Surveys were conducted prior to the 2022 Conference (n=40, 62% of 2022 conference attendees), immediately post-conference (n=21, 32% of 2022 conference attendees) and 6-months post-conference (n=15, 23% of 2022 conference attendees). To examine potential longevity of Conference impact, participants from the 2021 Conference were surveyed 12 months after attending the Conference (n=4, 16% of 2021 conference attendees). While these numbers represent a fraction of the total cohort, the intent of this paper is to present lessons learned about the conference organisation, design and facilitation as identified through participant experience, rather than a statistical analysis of impacts over time. While acknowledging the possibility of bias within the sample, the effects are likely to be small and unlikely to influence the findings (Catalogue of Bias Collaboration et al., 2017) in a study of this nature.

Across the surveys and interviews, thematic analysis indicated participant experience of the Conference spanned three overarching themes: networks and connection (professional and personal), resources and information, and building leadership capacity (Table 1).

Networks and connection.

Prior to the Conference, participants had neutral sentiments about how connected they felt with other STEM students and their access to mentors (Figure 1). Our results suggest that following the Conference, participants felt more connected within their community on both a personal and professional level, as exemplified in the following responses:

> *"The PhD Dinner was a great opportunity for me to talk to a lot of people and I met students who were in their 4th year and who have done a lot within the university, so I chatted with them and got to know a lot of things."*

> *"That was not someone I was going to come across in my own time so it was very valuable. That was really, it was a really helpful match".*

Table 1: Core themes across interviews with participants from 2022 Conference (n = 8).

Theme/sub-theme	Description	Example
Networks and Connection		
Professional	Connections with academic and industry professionals, ask advice and seek potential opportunities.	"…I've reached out to [my mentor] and we are catching up to talk about her research, as it's something I just find really interesting and I think that will be really valuable for me in terms of picking a specialisation in medicine..."
Personal	Connect with their peers from different STEM backgrounds which facilitated broader community building.	"…creating some networks outside of my classes in my degree, that was the aspect I really enjoyed…"
Resources and Information		
	Access to information about diverse careers enabled greater awareness of future options.	"…I feel like there's not a lot of places where I can…get concentrated information like that, about what Honours is like, what a PhD is like, what are the pathways...once you finish. I think that was really good."
Building Leadership Capacity		

	Increased confidence to try new things, improve their skills and to connect with others. Learning from the experiences of others to enhance personal decision making.	"…I feel like I have a lot of… awareness that, really, I think what was holding me back is thinking that I wasn't good enough and that there were other people better than me…"

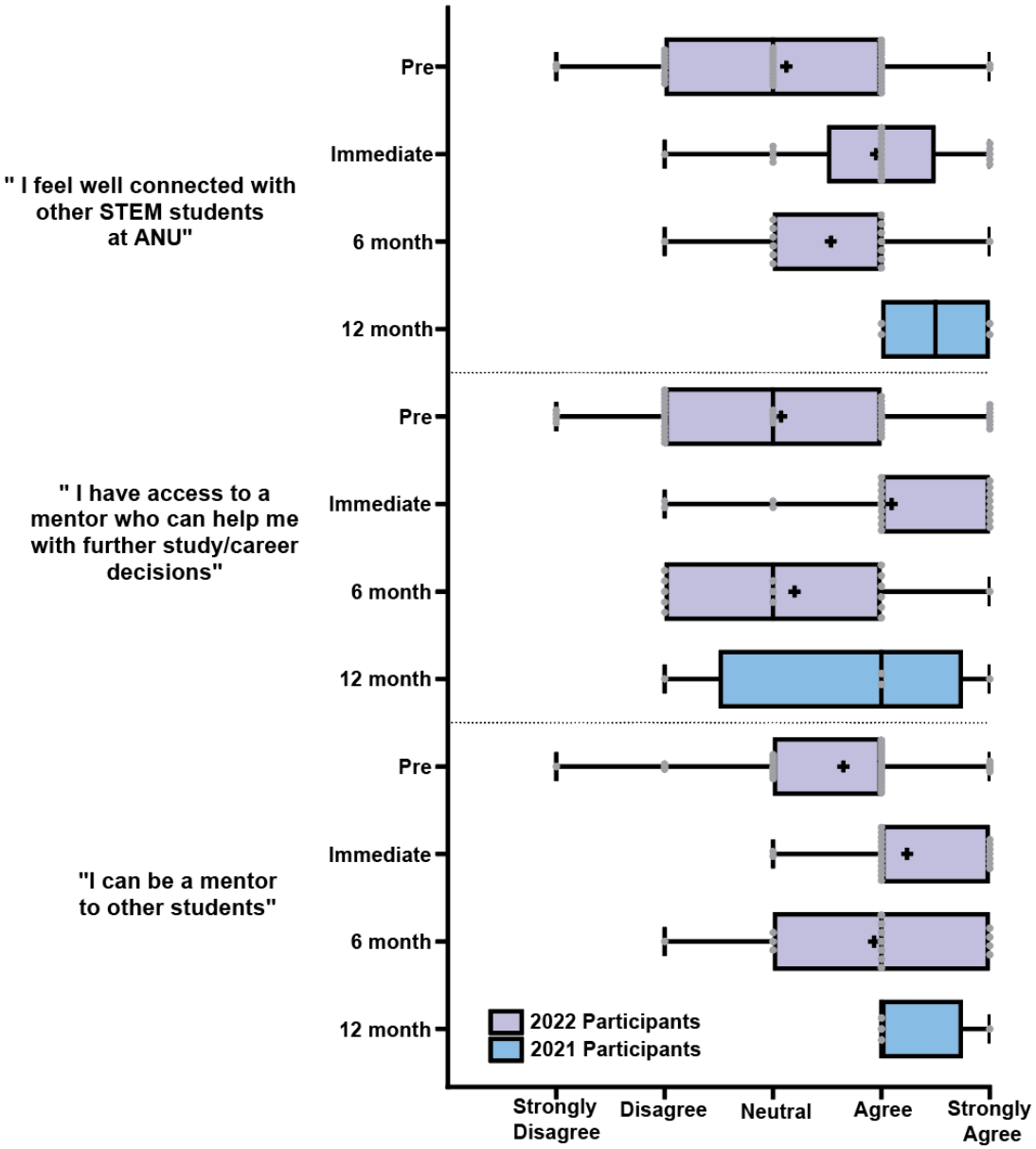

Figure 1: Survey responses regarding participant feeling associated with various networking and connection related statements. *Box indicates the 25th and 75th percentile, and median. Whiskers indicate the minimum value to maximum value. Mean response indicated by cross. Each grey dot represents an individual participant response.*

This is further evidenced by the immediate post-conference survey in which participants on average agreed that they felt well connected to their STEM peers, indicated an increase in access to mentorship and feelings of being able to be a mentor to other students (Figure 1). Interestingly, in the case of connection with other students and accessibility to a mentor, by 6 months following the conference, surveys indicate participant feelings began to return towards neutral levels (Figure

1). This was not the case for the 2021 participants however, with all participants bar one stating they agree or strongly agree that they felt connected to other STEM students at ANU and had access to mentorship 12 months following the Conference (Figure 1).

Participants found sessions engaging with STEM professionals internal and external to the university as the most useful, with the STEM in the Community Panel and the academic mentoring afternoon tea sessions being the most popular. This potentially speaks to the idea that having access to this sort of network is an infrequent but highly valued opportunity for STEM students, learning how to navigate and engage with the STEM ecosystem, as illustrated by this participant comment: "I haven't got the opportunity to do that many networking kind of activities."

Resources and Information

The pre-conference survey showed participants were eager to gain information and insight into potential next steps following their degree, as the following responses illustrate:

> *"Also to be inspired and hear about future career opportunities and others' experiences."*
>
> *"An understanding of pathways of getting into the field of interest and how to access opportunities."*
>
> *"To gain leadership and networking skills, as well as formulate a rough understanding of where a career in STEM may end up."*

One goal of the Conference was for participants to gain more knowledge about post-graduate degrees, industry careers and relevant opportunities. Resources and information were highly valued outcomes of conference participation, with participants particularly valuing sessions such as CV building, the mentoring afternoon tea and the STEM in the community panel. Specifically, participants identified that information about potential post-degree and career pathways was highly relevant and helpful for future decision-making. Participants highlighted that the format of the Conference made information readily accessible. Participants could gain the information, begin to make decisions, seek advice from professionals and peers and re-consider decisions, all within the same venue and the span of a few days. Many participants reported feeling better equipped to make informed decisions about their future. Figure 2 illustrates that participants' understanding of study options and career paths increased post conference and was maintained for at least 12 months. Interviewees provided additional insight:

> *"I really appreciated the CV workshop from ANU Careers and the mentoring session. Both were incredibly engaging, relevant to my life and degree right now, and made me feel more confident going into the future."*
>
> *"The panel event was really insightful to get the perspective of women who have had diverse and successful careers. It was really good to*

hear their journey and to know that it is not linear and that perhaps where you are most suited to be in isn't where you originally thought."

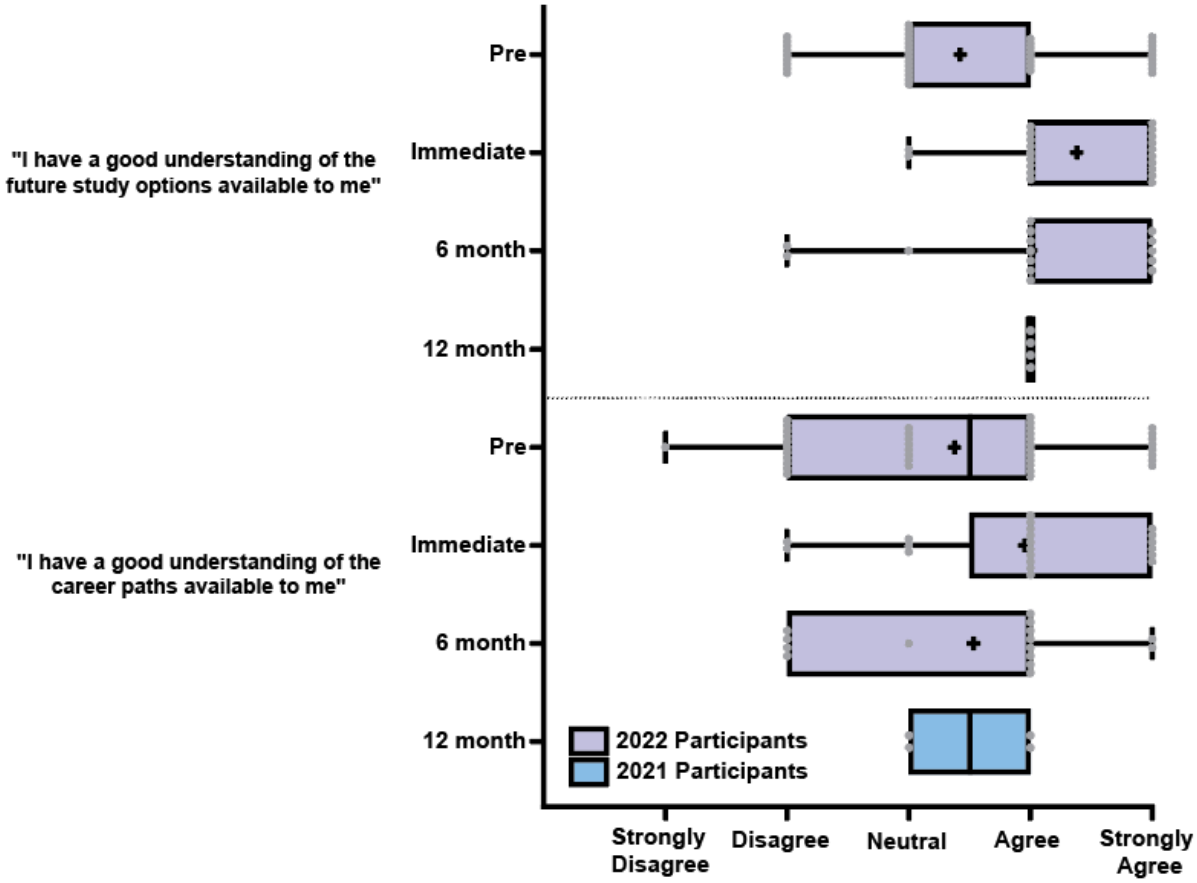

Figure 2: Survey responses regarding participant feeling associated with various resource and information related statements. *Box indicates the 25th and 75th percentile, and median. Whiskers indicate the minimum value to maximum value. Mean response indicated by cross. Each grey dot represents an individual participant response.*

Building Leadership Capacity

Survey results and interview responses show that participants gained confidence, feel more empowered to make decisions about their future and seek out opportunities. The analysis showed that confidence was often paired with a discussion or acknowledgement of gendered issues in STEM, with a participant's confidence often linked with their past experiences in STEM, how they perceive what it means to be a woman in STEM and the strength of their connection with the women in STEM community. With increased feelings of empowerment and confidence, participants were able to develop their understanding of leadership and leadership skills. The number of participants who agreed that they could see themselves as a future leader increased following the Conference and stayed higher than pre-conference levels at both six- and 12-months post-conference (Figure 3).

The following quotes exemplify the link between confidence and these experiences:

> *"I learnt so much about how I present myself & my own achievements, and why I have such confidence issues. I also learnt that I am part of a broader community of women* in STEM who feel exactly the same way and have very similar experiences. You hear about things being common issues, but it's another thing entirely to have 65 other people validate them."*

> *"…and then the 50Fifty session on overcoming imposter syndrome and the confidence side of things I thought that was quite a useful thing as well, in terms of realising how much we tend to dumb down, not dumb down but reduce our own expertise or that side of things as well, so that was quite useful as well..."*

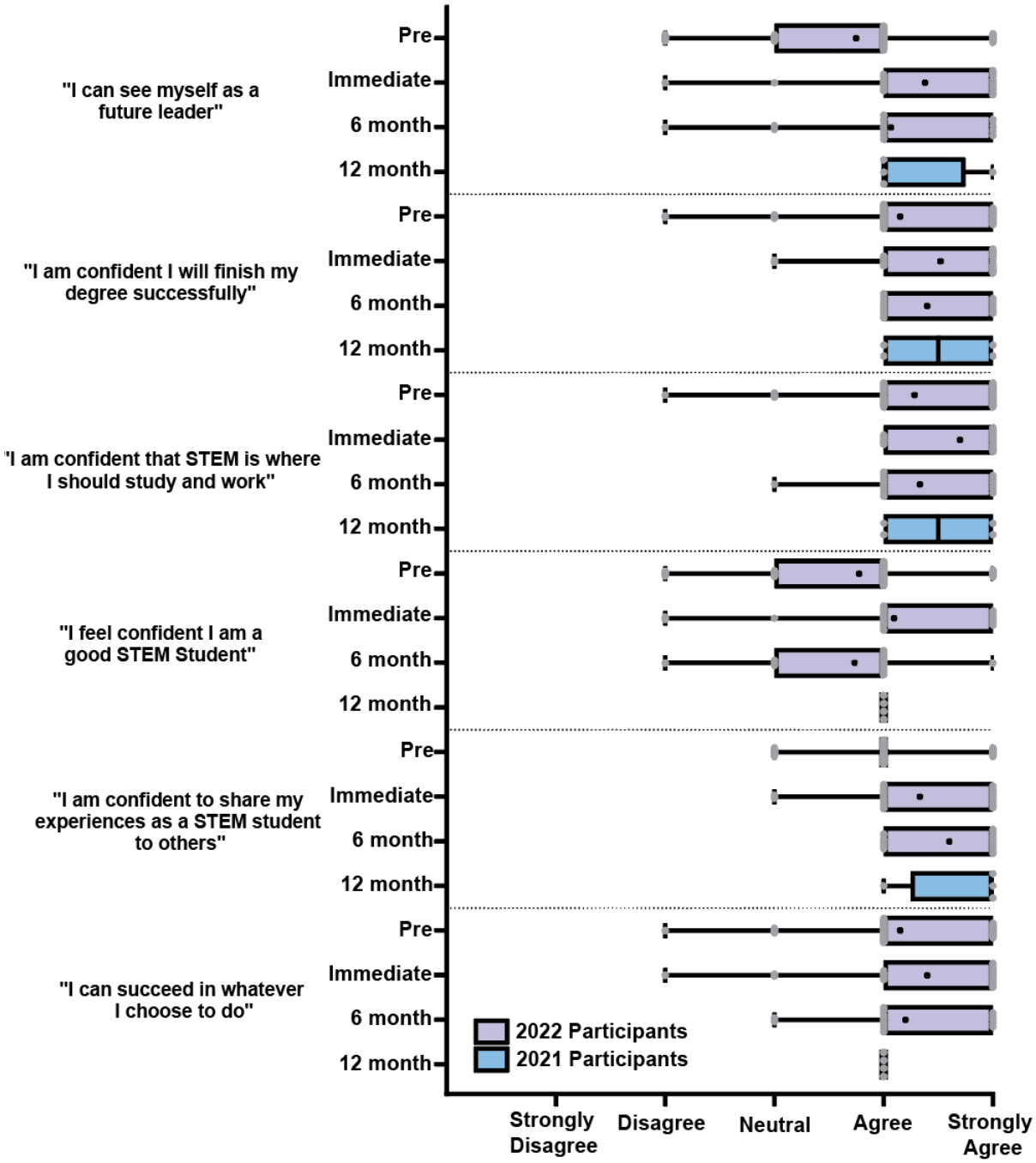

Figure 3: Survey responses regarding participant feeling associated with building leadership capacity related statements. *Box indicates the 25th and 75th percentile, and median. Whiskers indicate the minimum value to maximum value. Mean response indicated by black dot. Each grey dot represents an individual participant response.*

LESSONS LEARNED

The following practical implementations are recommended for similar programs.

- **Involve the target audience in the program organisation.** Participants in this study identified that this program was more beneficial to them than any other women in STEM program they had attended because it felt personalised to them. This was achieved through having an organising committee purely consisting of student volunteers who were at similar or slightly higher stages of their pathways as the attendees.
- **Use small groups for mentoring.** Participants in this study who had one-to-one mentor pairings during the academic mentoring afternoon tea sometimes identified the difficulty in maintaining conversation or struggling with nervousness. Participants who were in a group with their mentor felt more at ease and could learn from both their peers and mentor.
- **Facilitate interdisciplinary connections**. Participants valued the diversity of perspectives the Conference provided by bringing in mentors and speakers from different fields and workplaces.
- **Hold concentrated events that occur over a few days.** When attending short, one-off events, participants can establish new connections and gain information. However, major, concentrated events mean that they can establish *and* strengthen new connections, gain a variety of information and resources all in one place and more meaningfully engage in the sessions.
- **Follow up with smaller, one-off events**. Conference participants often expressed a desire for a short, follow up event to help them maintain new connections and retain their sense of inclusion. This is not something the Conference had done in the first few years but is a gap the organisers will be addressing in future.

This case study shows that a two-day, student-led conference can have a lasting impact on participants' sense of confidence and belonging in their chosen STEM degree and intended career. Participants valued the opportunity to hear different perspectives, have their own experiences validated and to feel a part of a community. Preliminary findings show these impacts persist, in some fashion, for at least six months after the Conference. Future studies will explore longer term impacts for participants, but the insights already gained, and lessons learned, from the Conference show that gender equity in STEM initiatives do not need to be complex or onerous to make a difference.

CONFLICTS OF INTEREST: Tegan Clark and Marissa Ellis were co-directors of the ANU Women* in STEM Leadership Conference during the time of data collection.

REFERENCES

Australian Academy of Science (2019) Women in STEM Decadal Plan, Canberra, Australian Academy of Science.

Australian Government (2023a). Higher Education Statistics: 2021 Student Data, Canberra, Department of Education. Available from:

https://www.education.gov.au/higher-education-statistics/student-data/selected-higher-education-statistics-2021-student-data.

Australian Government (2023b). Higher Education Statistics: 2021 Staff Data, Canberra, Department of Education. Available from: https://www.education.gov.au/higher-education-statistics/staff-data/selected-higher-education-statistics-2021-staff-data.

Beck, M., Cadwell, J., Kern, A., Wu, K., Dickerson, M. & Howard, M. (2022). Critical feminist analysis of STEM mentoring programs: A meta-synthesis of the existing literature. *Gender, Work & Organization*, *29*(1), 167-187.

Bian, L., Leslie, S.J. & Cimpian, A. (2017). Gender stereotypes about intellectual ability emerge early and influence children's interests. *Science, 355*(6323), 389–391. https://10.1126/science.aah6524

Carey, J. (2023). Taking to the Field: A History of Australian Women in Science. Monash University Publishing.

Catalogue of Bias Collaboration, Bankhead, C., Aronson, J.K. and Nunan, D. (2017) Attrition bias. In: Catalogue Of Bias 2017. https://catalogofbias.org/biases/attrition-bias/

Cimpian, J.R., Lubienski, S.T., Timmer, J.D., Makowski, M.B. & Miller, E.K. (2016). Have gender gaps in math closed? Achievement, teacher perceptions, and learning behaviors across two ECLS-K cohorts. *AERA Open, 2*(4), 2332858416673617. https://10.1177/2332858416673617

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

Commonwealth of Australia, (2015), National Innovation and Science Agenda, Canberra, Department of the Prime Minister and Cabinet.

De Welde, K., & Laursen, S. (2011). The glass obstacle course: Informal and formal barriers for women Ph. D. students in STEM fields. *International Journal of Gender, Science and Technology*, *3*(3), 571-595. Retrieved from https://genderandset.open.ac.uk/index.php/genderandset/article/view/205

Eagly, A. H., & Carli, L. L. (2007). *Through the labyrinth: The truth about how women become leaders*. Harvard Business Press.

Kalev, A., Dobbin, F. & Kelly, E. (2006). Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies, *American Sociological Review, 71*(4), 589–617. https://doi.org/10.1177/000312240607100404

Konik. J. & Cortina, L.M. (2008). Policing gender at work: Intersections of harassment based on sex and sexuality. *Soc Justice Res, 21*(3), 313–337. https://doi.org/10.1007/s11211-008-0074-z

McKinnon, M. (2022). The absence of evidence of the effectiveness of Australian gender equity in STEM initiatives, *Australian Journal of Social Issues, 57*(1), 202–214. https://doi.org/10.1002/ajs4.142

Mondisa, J.L., Packard, B.W.L. & Montgomery, B.L. (2021). Understanding what STEM mentoring ecosystems need to thrive: A STEM-ME framework. *Mentoring & Tutoring: Partnership in Learning*, *29*(1), 110-135. https://doi.org/10.1080/13611267.2021.1899588

Müller, J., Castaño, C., González, A. & Palmén, R. (2011). Policy towards gender equality in science and research, *Brussels Economic Review, 54*(2–3), 295–316. https://EconPapers.repec.org/RePEc:bxr:bxrceb:2013/108956

National Academies of Sciences, Engineering, and Medicine (2018) Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine. Washington, DC: The National Academies Press. https://doi.org/10.17226/24994

O'Dea, R.E., Lagisz, M., Jennions, M.D. & Nakagawa, S. (2018). Gender differences in individual variation in academic grades fail to fit expected patterns for STEM. *Nat Commun, 9*, 3777. https://doi.org/10.1038/s41467-018-06292-0

Pell, A.N. (1996). Fixing the leaky pipeline: women scientists in academia*. J. Anim. Sci. 74*(11), 2843–2848. https://doi.org/10.2527/1996.74112843x.

Rincon, B.E. & George-Jackson, C.E. (2016). STEM intervention programs: funding practices and challenges. *Studies in Higher Education, 41*(3), 429–444. https://doi.org/10.1080/03075079.2014.927845

Sadler, K., Eilam, E., Bigger, S.W. & Barry, F. (2018). University-led STEM outreach programs: purposes, impacts, stakeholder needs and institutional support at nine Australian Universities, *Studies in Higher Education, 43*(3), 586–599. https://doi.org/10.1080/03075079.2016.1185775

Settles, I.S., O'Connor, R.C. & Yap, S.C.Y. (2016). Climate perceptions and identity interference among undergraduate women in STEM: The protective role of gender identity. *Psychol Women Quart, 40*(4), 488–503. https://doi.org/10.1177/0361684316655806

Smyth, F.L. & Nosek, B.A. (2015). On the gender-science stereotypes held by scientists: explicit accord with gender-ratios, implicit accord with scientific identity. *Front Psychol, 6*, 415. https://doi.org/10.3389/fpsyg.2015.00415

White, K. (2015). Keeping women in science. Melbourne Univ. Publishing.

Women in Science Engineering & Technology Advisory Group (1995) Women in Science, Engineering and Technology, Available from: https://www.engineersaustralia.org.au/resource-centre/resource/women-science-engineering-and-technology.

APPENDIX A: Conference Session Table

Session Name	Length	Description
Guided Discussion	1 hour	This session sought to establish a safe and positive environment for the whole conference. Participants were given the opportunity to discuss their experiences in STEM and learn about the experiences of others.
Leadership Workshop	1 hour	Participants were guided through topics such as "Overcoming Imposter Syndrome" and "Leading From Behind". Participants were able to reflect on how they could become a leader in their everyday life and the importance of diversity and inclusivity in leadership in STEM.
Coaching Session	30 minutes	This session was delivered by a professional coach who spoke about mapping out goals and expectations for developing leadership capacity.
STEM in the Community Panel	1 hour 15 minutes	This panel brought together 4 women* who work in the Australian Capital Territory in non-academic positions e.g. the founder of a composting company, a science communication professional. Panellists discussed topics such as toxic work environments, having families and leaving academia.
CV Building + Pathways in STEM	1 hour 15 minutes	Participants were guided through a presentation on how to build an effective CV by a career professional. Participants then heard from Honours and PhD students and an academic with a post-doc position to learn about different academic pathways in STEM.
PhDinner	2 hours 30 minutes	Participants and PhD students were invited to a formal dinner to network with each other and to also engage in community building in a fun setting.
Fifty50	1 hour	A student society at the ANU ran a session on language and an unconscious bias.
Leadership Scenario	1 hour 15 minutes	Participants worked in groups to discuss and debate a global issue facing humanity through the lens of STEM. In 2021, participants debated Net Zero goals and presented solutions to debunking covid conspiracies. In 2022, participants debated alternative fuel sources and nuclear energy.
Orienteering Challenge	1 hour 15 minutes	Conference team organisers designed an orienteering challenge to take place around the ANU campus. Participants were given puzzles that they had to solve to find a clue that would lead them to the next spot. Puzzles were STEM themed.
Keynote Speaker	1 hour 30 minutes	A prominent woman* in STEM was invited to deliver a keynote speech about their career, research, achievements and the barriers they have faced being a woman* in STEM. This event was open to the public.
Academic Mentoring Afternoon Tea	1 hour 45 minutes	Participants were matched with an academic mentor based on what field of STEM they were interested in. Mentors were all academic staff of the university and were approached based on participant fields of interest. Some participants had a one-to-one conversation

whilst others might have been placed in a group with an academic (usually only up to three-to-one). Participants were encouraged to ask their mentor questions regarding their field of research, advice on careers in STEM and academia and their experiences of being a woman* in STEM. Both mentors (told during recruitment) and participants were advised there was no expectation that the mentoring relationship pursued past the mentoring afternoon, however, could pursue this, should they both wish to.