

Summary Talk WG7: IDEEO






Inclusion, Diversity, Equity, Education & Outreach



Jessica Esquivel, Yosef (Yossi) Nir and Poonam Mehta

NuFact 2025, University of Liverpool, 1-6 September 2025

3 Plenary talks

Date & time	Speaker		Title
2 Sep, 2025, 10 am	Srubabati Goswami		Gender and Physics in India and the rest of Asia
3 Sep, 2025, 10 am	Jessica Esquivel		The State of Inclusion, Diversity, Equity, Education, and Outreach in the United States: Challenges and Opportunities for the Physics Community
5 Sep, 2025, 10 am	Matt Mears		The IOP JUNO and Physics Inclusion Awards

Poster & short talk

Date	Presenter		Title
3 Sep, 2025	Jessie Micallef	 A portrait of a young woman with long dark hair, wearing a grey blazer and a dark scarf, smiling at the camera.	Creating the Buddy System : Networking Program for Large Collaboration Meetings

Myth of objective science

- A central theme is the "*Myth of Objective Science*", which suggests science is a "*culture of no culture*".
- Research shows that physics has significant underrepresentation of women and marginalized groups.
- For example, only 21% of PhD physicists are women, and just 1.4% of women physicists are Black in the United States.
- Systemic biases, like those found in the Tuskegee experiment and the unethical work of Dr. J. Marion Sims, demonstrate that science and medicine have not always been objective.

DEI in the US

- Current snapshot of DEI metrics in the US and effects on physics workforce
- Systemic challenges and institutional barriers
- Successful initiatives and case studies
- Science, Culture and creative conflict : in reach
- Recommended actions for fostering inclusive education and outreach

Gender & physics in Asia

- In Asia, DEI efforts are primarily centered on improving the male/female ratio in STEM.
- The percentage of women researchers in Asia varies by country, with many above the global average of 28.4%.
- However, a common challenge is the “*leaky pipeline effect*”: the number of women researchers decreases drastically as one moves up the career ladder.
- Traditional gender roles, the need to balance career and family, and biases against women in leadership roles are major contributing factors.

Gender & physics in Asia

- Key findings on gender representation trends in Indian and Asian physics communities (China, Japan, South Korea, Iran, Bangladesh, India)
- Structural or cultural barriers highlighted
- Impactful initiatives or success stories mentioned
- Proposed strategies for improving gender equity in the region

From Project Juno to the Physics Inclusion Award (PIA)

- The UK's Institute of Physics (IOP) previously ran Project Juno to promote gender equality.
- A 2013 evaluation found that while Juno had an impact on the representation of women at individual institutions, there was no clear overall relationship with national data trends.
- The program was also burdensome, with the administrative workload often falling unfairly on women.

Physics Inclusion Award (PIA)

- In 2023, the IOP retired Project Juno and launched the new Physics Inclusion Award (PIA).
- The PIA shifts the focus to a broader range of Equality, Diversity, and Inclusion (EDI) characteristics.
- The new system is portfolio-based and less burdensome, designed to recognize and celebrate departments for taking meaningful action toward an inclusive culture.
- This represents an institutional move toward a more comprehensive and sustainable approach to EDI.

The Buddy system: A networking solution

- Presented by Jessie Micallef, the Buddy System is a low-commitment networking program for large collaboration meetings.
- Its goal is to create one-on-one networking matches for new, virtual, and early-career members to help them feel more connected.
- The system is explicitly "NOT Mentoring" but rather a practical way for participants to make connections based on shared interests in physics, hobbies, or identity.

The Buddy system: In action

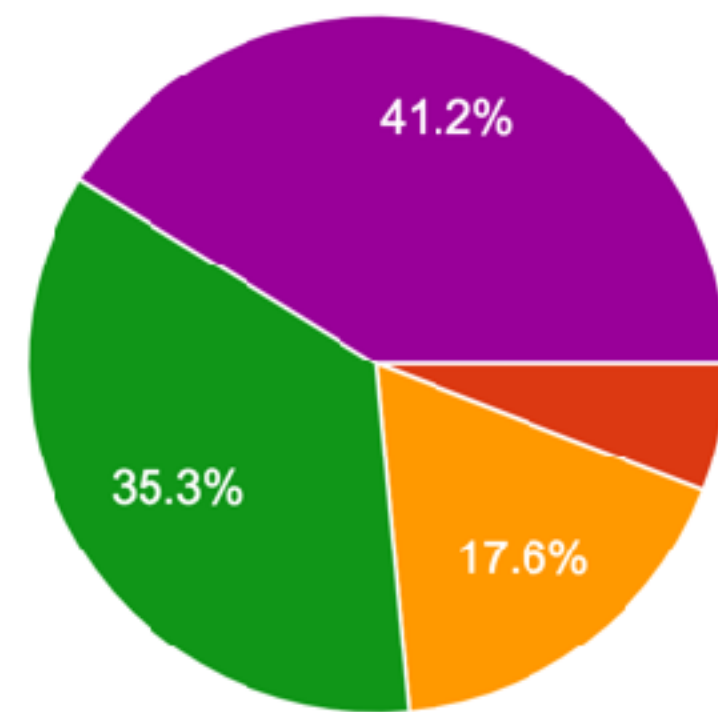
- Participants use a "*choose your own adventure*" model, prioritizing what they want to discuss.
- The system makes a single, informal match for a meet-up during a coffee break, minimizing commitment and stress.
- Feedback has been very positive, with participants praising it as a low-stress way to connect with peers and senior colleagues they might not otherwise have met.

IDEEO Survey

<https://forms.gle/7KGfkDqTwDQTwTBs6>

Career Stage

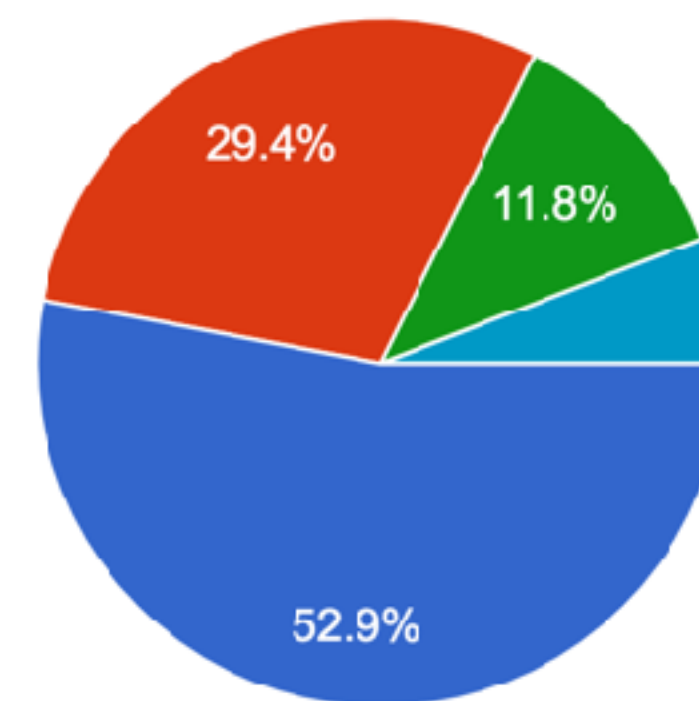
17 responses



- Undergraduate Student
- Postgraduate Student
- Graduate Student
- Post-doctoral Researcher
- Faculty / Senior researcher
- Others

Gender Identity

17 responses



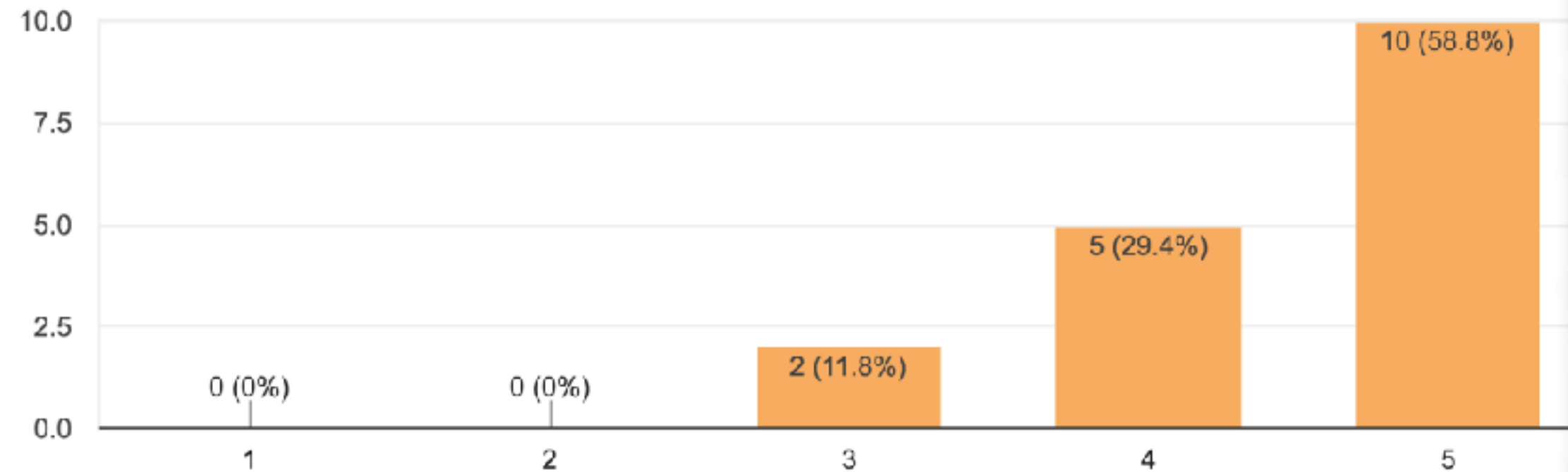
- Female
- Male
- Non-binary / Third gender
- Prefer not to say
- Other
- Genderqueer, demigirl

IDEEO Survey

<https://forms.gle/7KGfkDqTwDQTwTBs6>

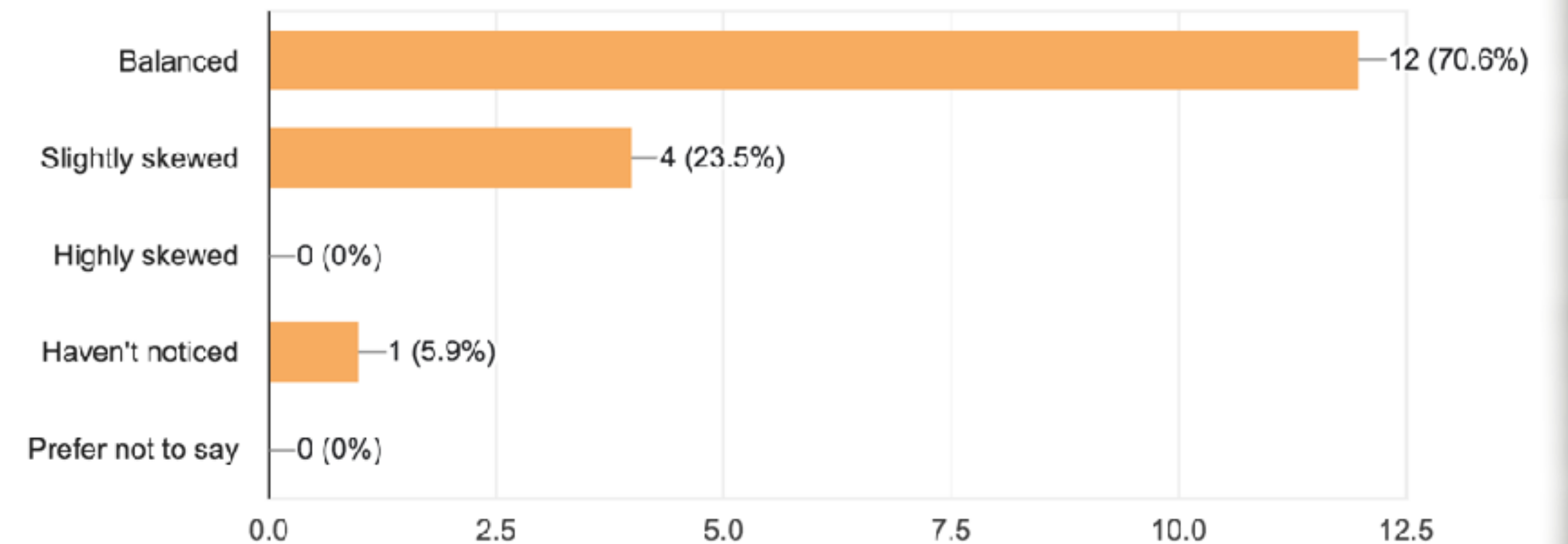
Do you agree with the statement "I felt a sense of belonging at NuFACT 2025." (Rate according to scale: 1 =Not at all, 5=Very much)

17 responses



Do you think the representation of genders (e.g., in speakers, chairs, committees) at NUFACT 2025 is

17 responses

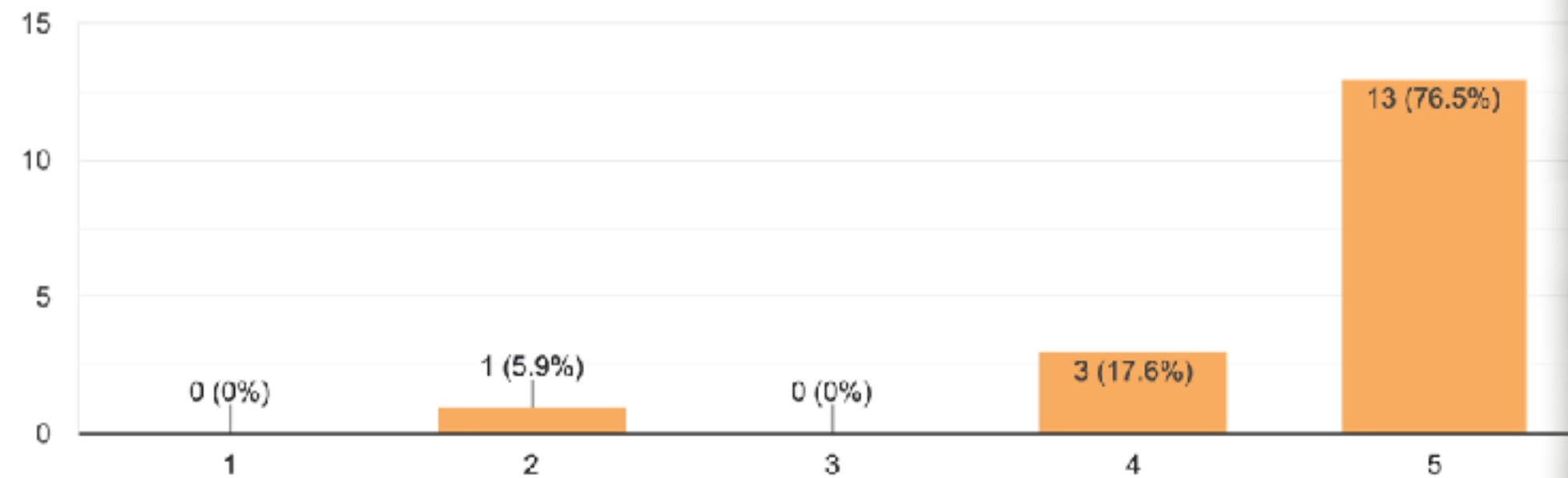


IDEEO Survey

<https://forms.gle/7KGfkDqTwDQTwTBs6>

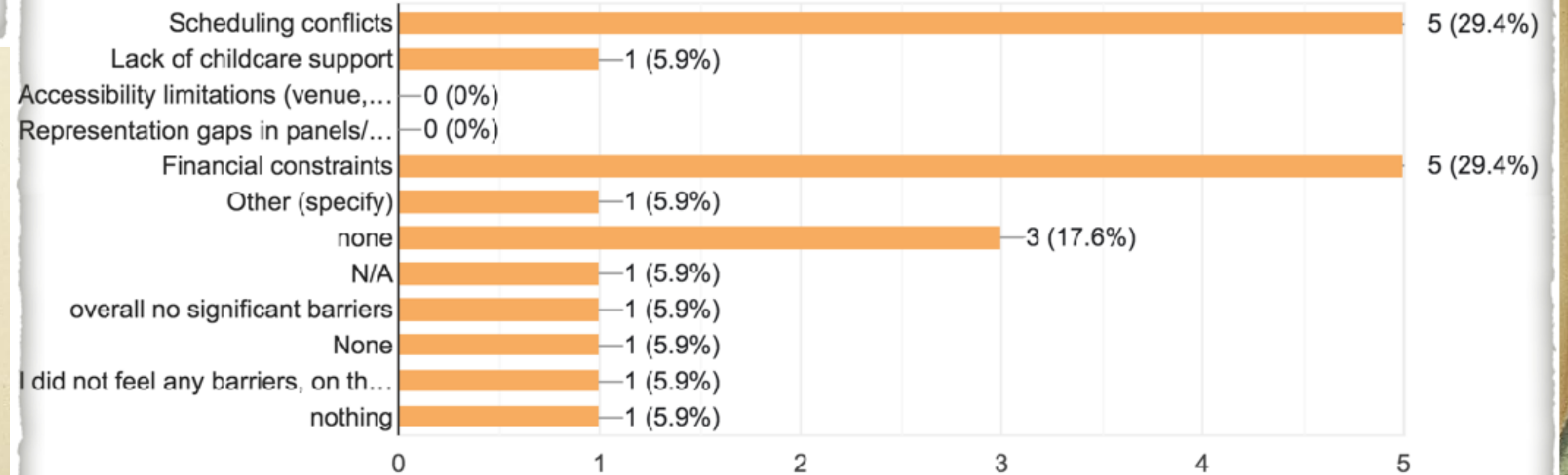
How fair were access to resources (e.g., networking, speaking opportunities) at the conference?
(Scale: 1=Poor, 5=Very good)

17 responses



What barriers did you face? (select all that apply)

17 responses

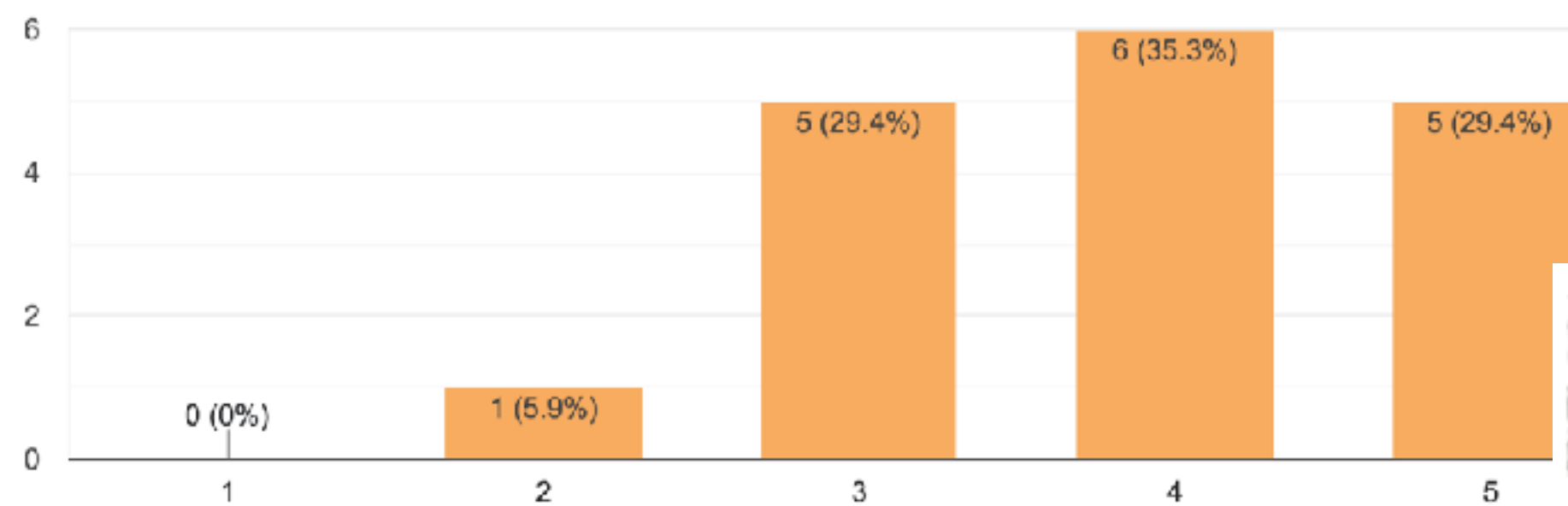


IDEEO Survey

<https://forms.gle/7KGfkDqTwDQTwTBs6>

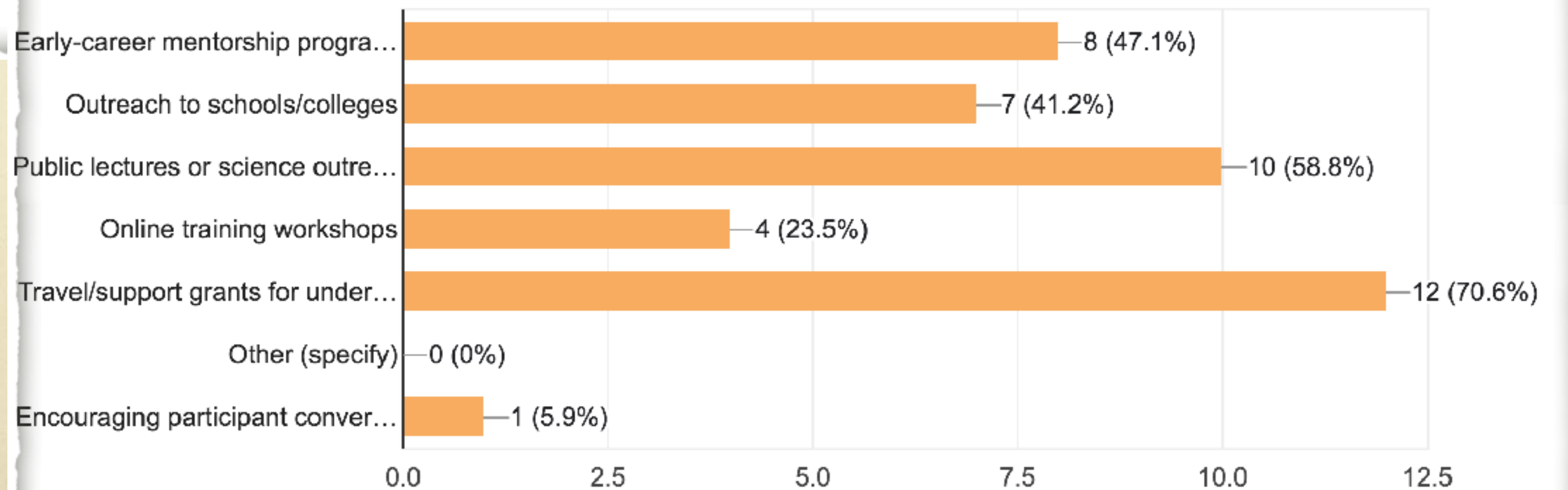
How effective were the educational and outreach efforts at NuFact 2025? (Scale: 1=Poor, 5=Very good)

17 responses



Which initiatives would you like to see expanded or added? (Select all that apply)

17 responses



Feedback:

Inclusion and accessibility

- maybe anonymous abstract submission (no or hidden name / institute until abstract is accepted)
- Really excited that someone had their pronouns on their slides. Liked that pronoun stickers were included for name tags
- Encouraging participant conversation and involvement discussing education & outreach (posters on outreach efforts). Loved the talks during plenary but that is passive engagement
- Provide travel grants or registration waivers for early-career researchers or those from countries with limited resources.
- The buddy system presented in the poster session was very interesting. It may be nice to implement at future NuFacts.

Additional Feedback

- It is a good idea to continue promoting NUFACT editions in Latin America.
- The poster talks are nice - good to give people a chance to present a short plenary talk to highlight achievements etc. The plenary ED&I talks were all excellent. In general I think other conferences could learn from these initiatives at NuFACT and it this conference is a good example to others.
- Keep going in this direction! In my opinion, bringing up those topics (especially with plenary talks mixed with the ones focused to physics topics) is a very effective starting point to raise awareness and, hopefully, get more people involved in this.

Summary

- To create a truly inclusive physics community, we need a combination of top-down and bottom-up initiatives.
- Institutional efforts, like the Physics Inclusion Award, provide a framework for systemic, cultural change.
- Grassroots solutions, like the Buddy System, empower individuals to build their own support networks and feel a sense of belonging.
- By addressing the problem from both the institutional and individual levels, we can work towards a more equitable and diverse future for physics.