

# Gender and ethnicity intersect to reduce participation at a large European Hybrid HIV Conference

## Supplementary Material

**Supplement S1.** Pre-structured observation tool used to gather information during the observed sessions.

Session Title:

Session Type:

	Online/ in person	Gender	Ethnicity	Country	Profession
Speakers					
Chairs					

Questions	Mode (chat/ microphone)	Gender	Ethnicity	Country	Job	Answered? Yes/ no
1						
2						
3						
4						
5						
6						
7						
8						
9						

**Supplement S2.** Questions included in the post-conference survey

## Q1. Age

- 18-25
- 26-30
- 31-34
- 35-40
- 41-50
- 51-60
- 60+

## Q2. Gender

- Cis-Female (assigned female at birth and identify as female)
- Cis-Male (assigned male at birth and identify as male)
- Transfemale
- Transmale Non-binary / nonconforming
- Other
- Prefer not to say

## Q3. Country of Residence

- White UK/White European/White Other
- Mixed or Multiple Ethnic Group
- Asian/ Asian British/ Asian Other
- Black African/ Black Caribbean/ Black British/Black Other
- Other Ethnic Group

## Q4. Current role (tick all that apply)

- Allied Health Professional (nurse, physio, dietician, psychologist, health advisor)
- Medical Student
- Doctor in Training (non infectious disease trainee)
- Academic Trainee
- Infectious Disease/ GU Trainee
- Infectious Disease / GU Consultant
- Other Consultant (non ID)
- GP / Family Doctor / Primary Care Physician
- Senior Academic / Professor
- Social Scientist / Researcher
- Community Member

## Q5. How would you describe your area of focus? (Tick all that apply)

- Clinical
- Epidemiology
- Public Health
- Social Science
- Basic Science
- Personal

## Q6. Is English your first language?

- Yes
- No

If no, do you consider yourself fluent in English?

Q7. How many conferences have you attended in your career?

- 1-5
- 6-10
- 11-20
- 21+

Q8. Do you prefer to attend a conference virtually or in person?

- Virtually
- In person
- Hybrid
- Don't mind

Q9. How do you prefer to ask a question at a conference?

- In the app / online platform
- At the microphone / in person
- Combination of both
- I prefer not to ask questions

Q10. How many questions did you ask at EACS 2021 in total, via the microphone, the app or live chat? (approximately if you cannot recall)

- 0
- 1-3
- 4-6
- 7-9
- 10+

Q11. How did you ask your questions?

- N/A - I did not ask a question
- Online
- In person/ at the microphone
- Mixture of both

Q12. If you asked a question online, did you post using your name or anonymously?

Q13. How many of your questions were picked or answered in total?

- 1
- 2
- 3
- 4
- 5
- 6+
- N/A

Q14. If you did not ask a question, or asked less than 4, why? Select all that apply.

- Not applicable - I asked 4 or more questions
- I had nothing to ask
- I was worried about asking a stupid question
- I have had previous rejection or bad experience when asking a question
- I felt too junior
- I felt too senior
- I felt embarrassed / shy / nervous when public speaking
- I found the panel/speaker/chair intimidating
- I found the audience intimidating
- I didn't want to appear arrogant or critical of the speaker
- Lack of confidence in my knowledge
- Lack of confidence in the English language
- There wasn't enough time
- My boss was in the audience

Q15. Do you have any further comments about asking questions at conferences?

**Supplement S3. Sessions attended at EACS by session type, the breakdown of male vs female panel members, the number of questions asked at each session and by whom, in relation to gender. Data presented as n (%).**

	Session Name	Session Type	Male panel	Female panel	Questions asked	Questions male	Questions female	% chair	Panel Majority	Questions majority
1	Educational - dermatology	Educational	2 (50%)	2 (50)	5	4 (80)	1 (20)	0%	50/50	male
2	Individualized Choices in Antiretroviral Therapy: Present and Future	Industry sponsored	1 (33.3)	2 (66.6)	2	1 (50)	1 (50)	0%	female	50/50
3	Oral Abstract Session 1 - Epidemiology	Oral abstracts	2 (33.3)	4 (66.6)	7	4 (57)	3 (43)	14%	female	male
4	Best Posters 2 - Social Sciences & Prevention	Poster	4 (40)	6 (60)	12	4 (33.3)	8 (66.6)	50%	female	female
5	Updates in PrEP implementation and regimens	parallel	3 (60)	2 (40)	14	8 (57)	6 (43)	14%	male	male
6	Oral Abstract Session 2 - Current issues in ART	Oral abstracts	4 (57)	3 (43)	15	10 (66.6)	5 (33.3)	26.60%	male	male
7	BHIVA Symposium - Improving Outcomes for People living with HIV	Industry sponsored	2 (33.3)	4 (66.6)	9	3 (33.3)	6 (66.6)	44.40%	female	female
8	Oral Abstract Session 3 - Comorbidities and Co-infections	Oral abstracts	3 (43)	4 (57)	17	12 (70.6)	5 (29.4)	29.40%	female	male
9	Best Posters 4 - Basic Science & HIV Cure	Poster	1 (11.1)	8 (88.9)	14	8 (57)	6 (43)	71.40%	female	male
10	Oral Abstract Session 4 - COVID19	Oral abstracts	7 (100)	0 (0)	5	4 (80)	1 (20)	80%	male	male
11	Best Posters 3 - Co-morbidities & Co-infections	Poster	6 (60)	4 (40)	14	9 (64)	5 (36)	28.50%	male	male
12	ACT NOW: Long-acting drugs against HIV	parallel	3 (37.5)	5 (62.5)	16	12 (75)	4 (25)	18.75%	female	male

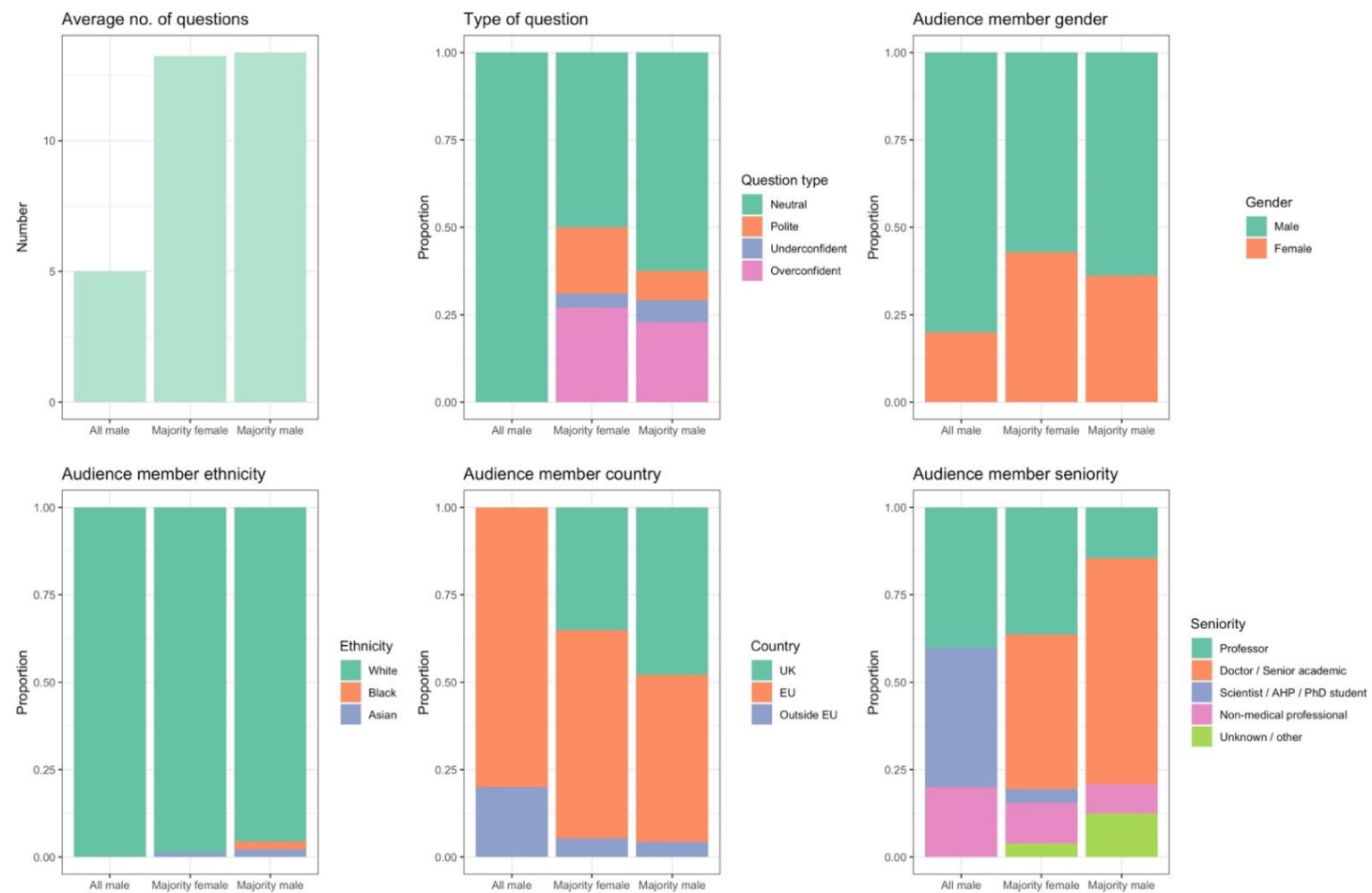
**Supplement S4. Sessions attended at EACS by session type, the breakdown of white vs other ethnicity panel members, the number of questions asked at each session and by whom, in relation to ethnicity. Data presented as n (%).**

	Session Name	Session Type	White panel	Other ethnicity panel	Questions asked	Questions white	Questions other ethnicity	% chair	panel % white	Questions majority gender	Q asked by other ethnicity
1	Educational - dermatology	Educational	4 (100)	0 (0)	5	4(80)	1(20)	0%	100%	male	20%
2	Individualized Choices in Antiretroviral Therapy: Present and Future	Industry sponsored	3 (100)	0 (0)	2	2(100)	0(0)	0%	100%	50/50	0%
3	Oral Abstract Session 1 - Epidemiology	Oral abstracts	6 (100)	0 (0)	7	7(100)	0(0)	14%	100%	male	0%
4	Best Posters 2 - Social Sciences & Prevention	Poster	7 (70)	3 (30)	12	12(100)	0(0)	50%	70%	female	0%
5	Updates in PrEP implementation and regimens	parallel	5 (100)	0 (0)	14	13(93)	0(0)	14%	100%	male	0%
6	Oral Abstract Session 2 - Current issues in ART	Oral abstracts	7 (100)	0 (0)	15	13(86.6)	0(0)	26.60%	100%	male	0%
7	BHIVA Symposium - Improving Outcomes for People living with HIV	Industry sponsored	5 (83.3)	1 (16.7)	9	9(100)	0(0)	44.40%	83.30%	female	0%
8	Oral Abstract Session 3 - Comorbidities and Co-infections	Oral abstracts	6 (85.7)	1 (14.3)	17	17(100)	0(0)	29.40%	85.70%	male	0%
9	Best Posters 4 - Basic Science & HIV Cure	Poster	6 (66.6)	3 (33.3)	14	14(100)	0(0)	71.40%	66.60%	male	0%
10	Oral Abstract Session 4 - COVID19	Oral abstracts	7 (100)	0 (0)	5	5(100)	0(0)	80%	100%	male	0%
11	Best Posters 3 - Co-morbidities & Co-infections	Poster	9 (90)	1 (10)	14	13(93)	1(7)	28.50%	90%	male	7%
12	ACT NOW: Long-acting drugs against HIV	parallel	7 (87.5)	1 (12.5)	16	14(37.5)	1(6.25)	18.75%	87.50%	male	6.25%

**Supplement S5. Characteristics of questions asked by panel composition.** Data presented as n (%).

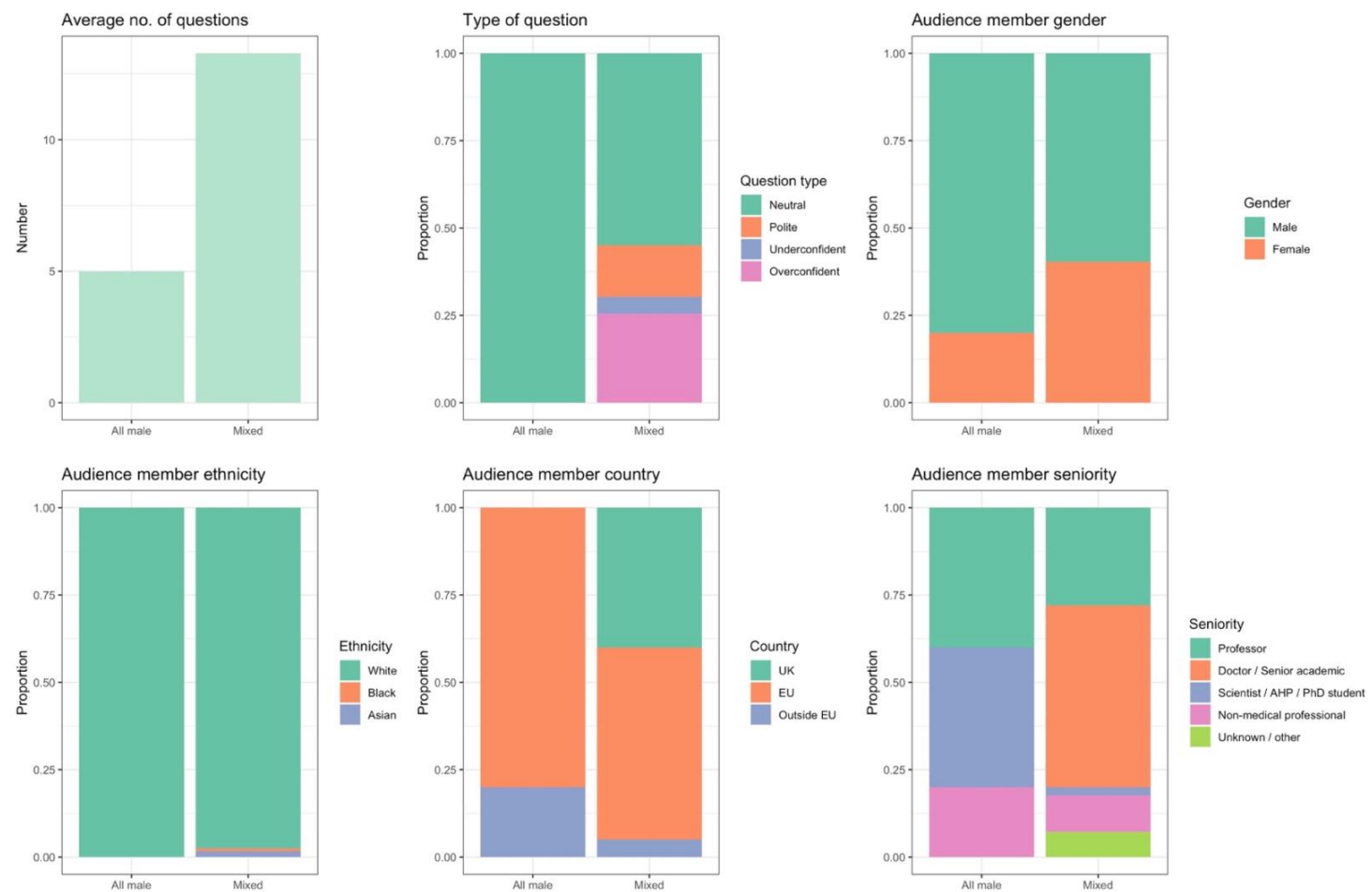
PANEL COMPOSITION	MAJORITY FEMALE	MAJORITY MALE	ALL MALE	P	MAJORITY WHITE	ALL WHITE	P
n	77	48	5		82	48	
<i>Question type</i>				<0.001			0.60
Neutral	37 (48.1)	30 (62.5)	1 (20.0)		46 (56.1)	22 (45.8)	
Polite	14 (18.2)	4 (8.3)	0 (0.0)		10 (12.2)	8 (16.7)	
Shows under-confidence	3 (3.9)	3 (6.2)	0 (0.0)		3 (3.7)	3 (6.2)	
Shows over-confidence	20 (26.0)	11 (22.9)	0 (0.0)		20 (24.4)	11 (22.9)	
Unknown	3 (3.9)	0 (0.0)	4 (80.0)		3 (3.7)	4 (8.3)	
<i>Mode</i>				0.02			0.04
Microphone	2 (2.6)	5 (10.4)	0 (0.0)		2 (2.4)	5 (10.4)	
Chat	45 (58.4)	33 (68.8)	1 (20.0)		47 (57.3)	32 (66.7)	
Chair/panel member	30 (39.0)	10 (20.8)	4 (80.0)		33 (40.2)	11 (22.9)	
<i>Gender</i>				0.54			0.36
Female	44 (57.1)	30 (62.5)	4 (80.0)		48 (58.5)	30 (62.5)	
Male	33 (42.9)	17 (35.4)	1 (20.0)		34 (41.5)	17 (35.4)	
Unknown	0 (0.0)	1 (2.1)	0 (0.0)		0 (0.0)	1 (2.1)	
<i>Observed ethnicity</i>				0.59			0.14
White	75 (97.4)	43 (89.6)	5 (100.0)		79 (96.3)	44 (91.7)	
Black	0 (0.0)	1 (2.1)	0 (0.0)		0 (0.0)	1 (2.1)	
Asian	1 (1.3)	1 (2.1)	0 (0.0)		2 (2.4)	0 (0.0)	
Unknown	1 (1.3)	3 (6.2)	0 (0.0)		1 (1.2)	3 (6.2)	
<i>Country</i>				0.34			0.09
UK	26 (33.8)	22 (45.8)	0 (0.0)		24 (29.3)	24 (50.0)	
Europe	44 (57.1)	22 (45.8)	4 (80.0)		49 (59.8)	21 (43.8)	
Outside EU	4 (5.2)	2 (4.2)	1 (20.0)		6 (7.3)	1 (2.1)	
Unknown	3 (3.9)	2 (4.2)	0 (0.0)		3 (3.7)	2 (4.2)	
<i>Seniority</i>				<0.001			0.01
Professor	28 (36.4)	7 (14.6)	2 (40.0)		29 (35.4)	8 (16.7)	
Doctor / Senior academic	34 (44.2)	31 (64.6)	0 (0.0)		38 (46.3)	27 (56.2)	
Scientist / AHP / PhD student	3 (3.9)	0 (0.0)	2 (40.0)		1 (1.2)	4 (8.3)	
Non-medical professional	9 (11.7)	4 (8.3)	1 (20.0)		11 (13.4)	3 (6.2)	
Unknown / other	3 (3.9)	6 (12.5)	0 (0.0)		3 (3.7)	6 (12.5)	

**Supplement S6. Relationship between panel composition by gender and audience participation.** Total 12 sessions: 1 all male, 7 majority (50% or more) female, 4 majority male.

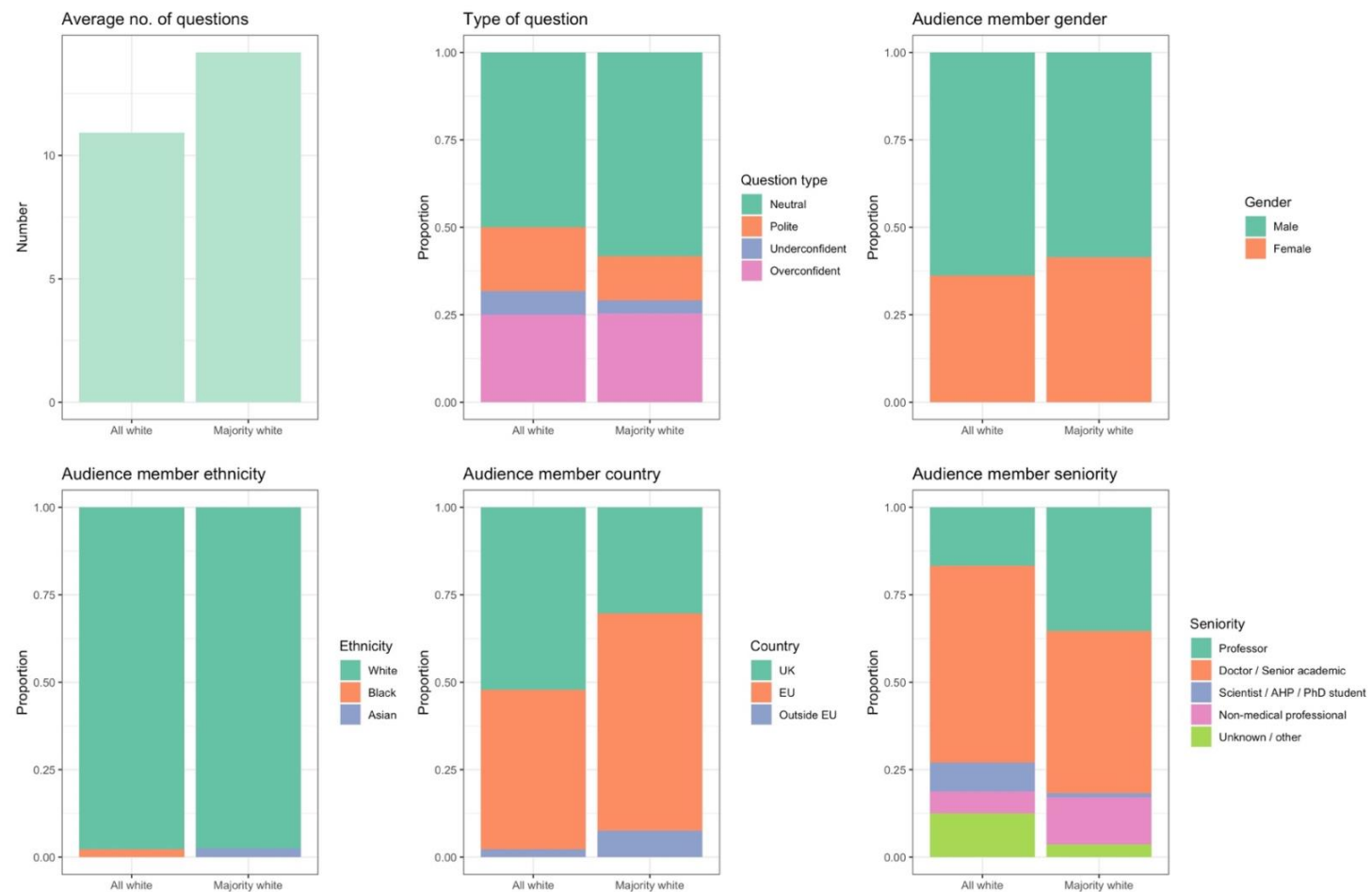




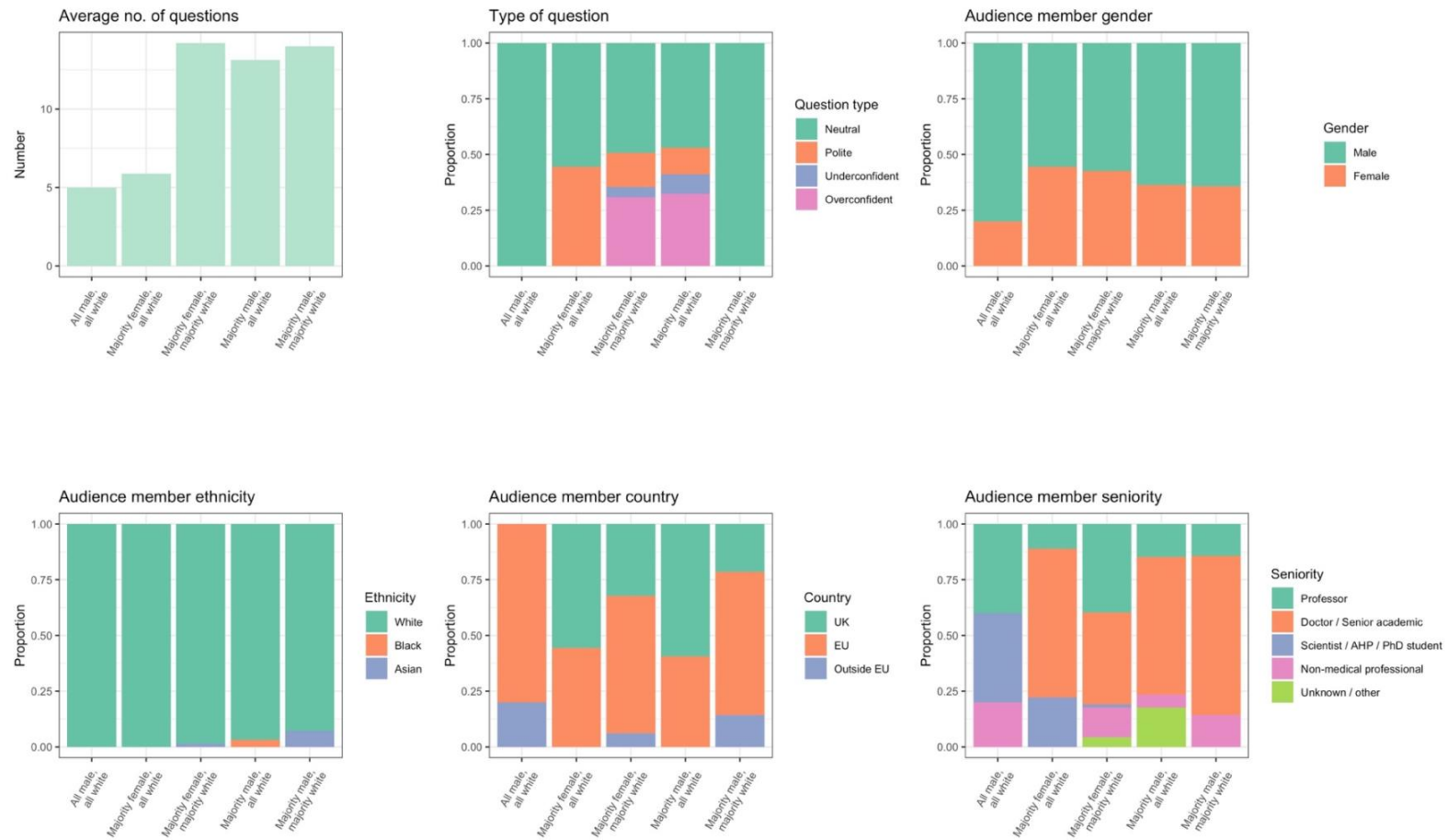
**Supplement S7. Relationship between panel composition by gender and audience participation.** Total 12 sessions: 1 all male, 11 mixed.



**Supplement S8. Relationship between panel composition by ethnicity and audience participation.** Total 12 sessions: 6 all white, 6 majority white.



**Supplement S9. Relationship between panel composition by gender and ethnicity and audience participation.** Total 12 sessions: 1 all male all white, 2 majority female all white, 5 majority female majority white, 3 majority male all white, 1 majority male majority white.



**Supplement S10.** Questions answered in survey broken down by self-identified gender and ethnicity, as reported by the respondents of the online survey. Data presented as n, (%)

Gender		Ethnicity				
Male	Female	White	Black	Asian	Mixed	Other
Have been to 21+ previous conferences						
136, (60)	130, (42.8)	220, (54)	4, (19)	14, (39)	18, (47.4)	21, (48.8)
Preference for Hybrid or Online (vs in-person or no preference)						
60, (26)	97, (32)	124, (30.4)	2, (9.5)	16, (44.4)	11, (29)	10, (23.3)
Preference for asking questions at the microphone (vs online)						
38, (16.7)	24, (7.9)	51 (12.5)	6 (28.6)	3 (8.3)	1 (2.6)	6 (14)
Asked 1 or more question at EACS 2021						
89, (39.2)	106, (34.9)	147, (36)	11, (52.4)	13, (36.1)	15, (39.5)	18, (41.9)

**Supplement S11.** Barriers to asking questions at EACS 2021, broken down by self-identified gender and ethnicity, reported by respondents of the online survey. (Data removed for respondents who did not give gender or ethnicity) Data presented as n, %

	Gender (Self-identified)		Ethnicity (Self-Identified)				
	Male	Female	White	Black	Asian	Mixed	Other
N/A (asked more than 4 questions)	28, 8.5%	19, 3.8%	34, 5.2%	4, 14.8%	3, 6.1%	2, 3.2%	5, 8.2%
I had nothing to ask	102, 30.8%	108, 21.8%	159, 24.5%	7, 25.9%	15, 30.6%	13, 20.6%	20, 32.8%
Worried about asking a stupid question	27, 8.1%	63, 12.7%	71, 10.9%	3, 11.1%	5, 10.2%	7, 11.1%	6, 9.8%
Previous rejection/bad experience	2, 0.6%	7, 1.4%	6, 0.9%	1, 3.7%	0, 0%	1, 1.6%	0, 0%
I felt too junior	17, 5.1%	36, 7.2%	42, 6.5%	1, 3.7%	4, 8.2%	5, 7.9%	2, 3.3%
I felt too senior	4, 1.2%	1, 0.2%	6, 0.9%	0, 0%	0, 0%	0, 0%	1, 1.6%
I felt embarrassed/ shy/ nervous speaking in public	24, 7.5%	60, 12.1%	71, 10.9%	1, 3.7%	4, 8.2%	6, 9.5%	3, 4.9%
I found the panel/ speaker/ chair intimidating	2, 0.6%	6, 1.2%	5, 0.8%	0, 0%	1, 2.0%	2, 3.2%	1, 1.6%
I found the audience intimidating	4, 1.2%	11, 2.2%	11, 1.7%	0, 0%	1, 2.0%	3, 4.8%	1, 1.6%
Didn't want to appear arrogant/ critical of the speaker	20, 6.0%	8, 1.6%	25, 3.9%	1, 3.7%	2, 4.1%	0, 0%	1, 1.6%
Lack of confidence in my knowledge	16, 4.8%	36, 7.2%	41, 6.3%	5, 18.5%	3, 6.1%	5, 7.9%	1, 1.6%
Lack of confidence in English language	28, 8.5%	47, 9.5%	63, 9.7%	0, 0%	4, 8.2%	6, 9.5%	7, 11.5%

There wasn't enough time	47, 14.2%	65, 13.1%	83, 12.8%	3, 11.1%	5, 10.2%	9, 14.3%	11, 18.0%
My boss was in the audience	0, 0%	1, 0.2%	1, 0.2%	0, 0%	0, 0%	0, 0%	0, 0%