Search Costs Field Experiment

2025-06-06

Contents

1	Sun	mmary Statistics	3
	1.1	Overall Summary Statistics	3
		1.1.1 Seminar Speaker Demographics	:
		1.1.2 Department Faculty Demographics	3
	1.2	Summary Statistics by Discipline	9
		1.2.1 Seminar Speaker Demographics by Discipline	3
		1.2.2 Department Faculty Demographics by Discipline	4
	1.3	Summary Statistics by Semester	4
2	Ma	in Effects Analysis	Ę
	2.1	Main Question 1: URM Speaker Representation	Ę
	2.2	Main Questions 2a-2c: Effects on Speaker Counts	6
	2.3	Seemingly Unrelated Regression (SUR) Analysis	ϵ
3	Der	mographic Subgroup Analysis	7
	3.1	Black Speakers	7
	3.2	Hispanic Speakers	7
	3.3	Female Speakers	7
	3.4	URM Female	8
	3.5	Black Female	8
	3.6	Black Male	8
	3.7	Hispanic Female	ę
	3.8	Hispanic Male	Ę
4	Dis	cipline Subgroup Analysis	10
		4.0.1 Chemistry (N=271)	10
		4.0.2 Mathematics (N=811)	11
		4.0.3 Physics (N=350)	11
		4.0.4 Computer Science (N=142)	12
		4.0.5 Mechanical Engineering (N=82)	13

5	Sen	nester-Specific Analysis	14
	5.1	Fall Semester	14
	5.2	Spring Semester	15
6	Het	erogeneity Analysis	16
	6.1	Moderation by Department Ranking	16
	6.2	Moderation by Total Faculty Size	17
	6.3	Moderation by URM Faculty in Peer Departments	18
7	Sun	nmary of All Significant Results	19
	7.1	Exploratory Analysis: Seniority Moderation	19
		7.1.1 Analysis 1: Does speaker seniority moderate the treatment effect?	19
8	Exp	oloratory Analysis: Seniority Moderation	20
	8.1	Distribution of Years Since PhD	20
	8.2	Continuous Moderation Analysis	20
		8.2.1 Outcome: Percentage Black Speakers	20
		8.2.2 Outcome: Any Black Speakers	21
	8.3	Subgroup Analysis: Seminars with Senior vs Junior Speakers	21
		8.3.1 Outcome: Percentage Black Speakers	21
		8.3.2 Outcome: Any Black Speakers	22
	8.4	Exploratory Analysis: Discipline Moderation	22
		8.4.1 Analysis 2: Does academic discipline moderate the treatment effect?	22
9	Exp	ploratory Analysis: Discipline Moderation	23
	9.1	Distribution Across Disciplines	23
	9.2	Full Interaction Model	23
		9.2.1 Outcome: Percentage Black Speakers	23
		9.2.2 Outcome: Any Black Speakers	24
	9.3	Summary of Exploratory Analyses	25

1 Summary Statistics

1.1 Overall Summary Statistics

1.1.1 Seminar Speaker Demographics

Table 1: Overall Seminar Statistics

Statistic	Value
Number of seminars	1656
Number of unique departments	530
Total speakers across all seminars	23168
Mean speakers per seminar	13.99
SD speakers per seminar	9.95
Min speakers in a seminar	1
Max speakers in a seminar	76

Table 2: Seminar Speaker Demographics (Across All Seminars)

Demographic Group	Mean $\%$	SD $\%$	Mean Count	SD Count	Pct. Any
URM	7.49	11.14	1.01	1.28	54.4
Black	2.25	5.98	0.32	0.69	23.4
Hispanic	5.21	9.54	0.69	1.01	43.1
Female	16.95	16.24	2.40	2.48	75.9

Note: N=1656 seminars. Percentages calculated among speakers with demographic data available. 'Pct. Any' indicates the percentage of seminars that have at least one speaker from that demographic group.

1.1.2 Department Faculty Demographics

Table 3: Department Faculty Demographics

		_
Statistic	Mean	SD
Total faculty per department	34.0	18.0
% URM faculty	4.11	4.40
% Women faculty	20.39	7.59

Note: N = 530 unique departments. Department faculty demographics based on 2024 coding.

1.2 Summary Statistics by Discipline

1.2.1 Seminar Speaker Demographics by Discipline

Table 4: Seminar Statistics by Discipline

Discipline	N Seminars	N Depts	Mean Speakers	SD Speakers
Chemistry	271	123	14.7	11.1
Computer Science	142	82	13.1	10.3
Mathematics	811	134	13.2	9.1
Mechanical Engineering	82	66	12.9	10.2
Physics	350	125	15.9	10.4

Table 5: Seminar Speaker Demographics by Discipline: URM

Discipline	N Seminars	Mean $\%$	SD $\%$	Mean Count	Pct. Has Any
Chemistry	271	8.95	10.52	1.28	64.6
Computer Science	142	4.44	8.01	0.56	36.6
Mathematics	811	7.10	10.75	0.94	50.3
Mechanical Engineering	82	8.07	9.06	1.10	62.2
Physics	350	8.35	13.53	1.13	61.4

Note: Statistics are for seminar speakers. 'Pct. Has Any' indicates percentage of seminars with at least one URM speaker.

Table 6: Seminar Speaker Demographics by Discipline: Other Groups

	В	lack	His	panic	Female	
Discipline	Mean $\%$	Pct. Any	Mean $\%$	Pct. Any	Mean $\%$	Pct. Any
Chemistry	4.23	39.5	4.61	46.1	23.48	86.3
Computer Science	1.54	17.6	2.91	24.6	19.14	78.2
Mathematics	1.78	19.2	5.31	41.1	13.98	70.4
Mechanical Engineering	3.00	29.3	5.08	46.3	19.56	75.6
Physics	1.91	21.4	6.44	52.0	17.27	79.7

Note: Statistics are for seminar speakers. 'Pct. Any' indicates percentage of seminars with at least one speaker from that group.

1.2.2 Department Faculty Demographics by Discipline

Table 7: Department Faculty Demographics by Discipline

			Faculty Size		% URM Faculty		% Women Faculty	
Discipline	N Depts	Mean	SD	Mean	$^{\mathrm{SD}}$	Mean	SD	
Chemistry	123	28.5	11.9	4.81	4.48	24.42	7.15	
Computer Science	82	43.5	25.0	2.79	3.27	20.12	7.28	
Mathematics	134	33.9	16.2	3.63	3.54	19.82	7.67	
Mechanical Engineering	66	36.1	19.1	5.56	5.44	19.56	7.63	
Physics	125	32.0	16.4	4.03	4.90	17.64	6.52	

Note: Department faculty demographics based on 2024 coding.

1.3 Summary Statistics by Semester

Table 8: Summary Statistics by Semester

	URM				Black		Hispanic	
Semester (N)	Mean $\%$	Mean Count	Pct. Any	Mean $\%$	Pct. Any	Mean $\%$	Pct. Any	
Fall (1448)	7.08	0.53	36.3	1.73	11.7	5.33	28.9	
Spring (1397)	7.58	0.64	42.1	2.71	18.5	4.84	30.0	
		Female			Speakers			
Semester	Mean $\%$	Mean Count	Pct. Any	Mean	SD			
Fall	16.17	1.27	62.0	7.75	5.50	-		
Spring	17.74	1.52	64.2	8.56	6.92			

Main Effects Analysis $\mathbf{2}$

Main Question 1: URM Speaker Representation

Table 9: Main Question 1: Effect on URM Speaker Representation

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.691	0.649	0.087	0.059	0.015	0.009
	(0.525)	(0.519)	(0.067)	(0.065)	(0.025)	(0.023)
Constant	8.561**** (1.632)	4.641^* (2.132)	1.178*** (0.172)	0.302 (0.285)	0.596*** (0.072)	0.257^{*} (0.115)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	1,656	1,656	1,656	1,656	1,656	1,656
	0.010	0.014	0.028	0.035	0.027	0.040

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Main Questions 2a-2c: Effects on Speaker Counts 2.2

Table 10: Main Questions 2a-2c: Effects on Speaker Counts

	% Count (1)	% Count (2)	Count Count (3)	Count Count (4)	Any Count (5)	Any Count (6)
Treatment	-0.461 (0.554)	-0.427 (0.546)	0.087 (0.067)	0.059 (0.065)	-0.548 (0.528)	-0.485 (0.521)
Constant	16.810*** (1.313)	13.460*** (2.452)	1.178*** (0.172)	0.302 (0.285)	15.631*** (1.247)	13.159*** (2.317)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.031	0.058	0.028	0.035	0.030	0.058

Clustered standard errors at department level in parentheses. $^+p<0.1;\,^*p<0.05;\,^{**}p<0.01;\,^{***}p<0.001$

2.3 Seemingly Unrelated Regression (SUR) Analysis

Table 11: SUR Analysis: Testing Substitution Between URM and Non-URM Speakers

Outcome	Coefficient	SE
URM Speakers Non-URM Speakers	0.0871 -0.5482	(0.0631) (0.4619)
Sum of Effects	-0.4611	_

Wald Test: H0: Treatment effect on URM + Treatment effect on Non-URM = 0

Note: SUR estimation with simple controls allows for correlation between equation errors. The Wald test examines whether the treatment effect represents a pure substitution (increasing URM speakers while decreasing non-URM speakers by the same amount).

3 Demographic Subgroup Analysis

Black Speakers 3.1

Table 12: Effect on Black Speakers

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.632*	0.611*	0.077 ⁺	0.075*	0.048*	0.047*
	(0.310)	(0.294)	(0.039)	(0.038)	(0.023)	(0.022)
Constant	2.841***	1.121	0.435***	0.119	0.294***	0.070
	(0.799)	(1.306)	(0.103)	(0.167)	(0.061)	(0.104)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	1,656	1,656	1,656	1,656	1,656	1,656
	0.025	0.029	0.046	0.054	0.034	0.042

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Hispanic Speakers 3.2

Table 13: Effect on Hispanic Speakers

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanio (6)
Treatment	0.074 (0.458)	0.045 (0.472)	0.010 (0.049)	-0.018 (0.049)	-0.019 (0.025)	-0.030 (0.025)
Constant	5.508*** (1.528)	3.304^{+} (1.936)	0.718*** (0.149)	0.147 (0.230)	0.450*** (0.076)	0.186^{+} (0.110)
Controls N Adjusted R^2	Simple 1,656 0.006	Extended 1,656 0.006	Simple 1,656 0.014	Extended 1,656 0.020	Simple 1,656 0.019	Extended 1,656 0.025

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Female Speakers 3.3

Table 14: Effect on Female Speakers

	% Female (1)	% Female (2)	Count Female (3)	Count Female (4)	Any Female (5)	Any Female (6)
Treatment	0.192	-0.310	-0.059	-0.124	-0.003	-0.008
	(0.837)	(0.829)	(0.129)	(0.128)	(0.022)	(0.021)
Constant	21.803***	13.564***	3.630***	2.267***	0.869***	0.678***
	(2.082)	(3.961)	(0.353)	(0.597)	(0.063)	(0.099)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	1,656	1,656	1,656	1,656	1,656	1,656
	0.049	0.057	0.086	0.102	0.017	0.029

Clustered standard errors at department level in parentheses. $^+p<0.1;\,^*p<0.05;\,^{**}p<0.01;\,^{***}p<0.001$

URM Female 3.4

Table 15: Effect on URM Female Speakers

	% URM Female	% URM Female	Count URM Female	Count URM Female	Any URM Female	Any URM Female
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.004	-0.064	0.019	0.011	0.011	0.004
	(0.172)	(0.183)	(0.019)	(0.019)	(0.016)	(0.017)
Constant	1.900**	0.036	0.217***	0.003	0.186***	-0.008
	(0.605)	(0.593)	(0.060)	(0.091)	(0.049)	(0.078)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.015	0.019	0.038	0.048	0.040	0.048

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Black Female 3.5

Table 16: Effect on Black Female Speakers

	% Black Female (1)	% Black Female (2)	Count Black Female (3)	Count Black Female (4)	Any Black Female (5)	Any Black Female (6)
				. ,	. ,	
Treatment	0.118^{+}	0.127^{+}	0.011	0.011	0.013	0.013^{+}
	(0.071)	(0.073)	(0.009)	(0.009)	(0.008)	(0.008)
Constant	0.561***	0.139	0.061**	0.005	0.049*	0.005
	(0.165)	(0.276)	(0.023)	(0.042)	(0.020)	(0.036)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1.656	1,656	1.656	1.656	1,656
Adjusted R^2	0.028	0.030	0.025	0.030	0.021	0.026

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

3.6 Black Male

Table 17: Effect on Black Male Speakers

				•		
	% Black Male	% Black Male	Count Black Male	Count Black Male	Any Black Male	Any Black Mal
	(1)	(2)	(3)	(3) (4)	(5)	(6)
Treatment	0.514+	0.484+	0.067+	0.064*	0.052*	0.051*
	(0.264)	(0.248)	(0.034)	(0.033)	(0.022)	(0.022)
Constant	2.281**	0.982	0.367***	0.110	0.281***	0.051
	(0.711)	(1.168)	(0.092)	(0.143)	(0.060)	(0.102)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted \mathbb{R}^2	0.017	0.021	0.038	0.044	0.033	0.041

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Hispanic Female 3.7

Table 18: Effect on Hispanic Female Speakers

	% Hispanic	% Hispanic	Count Hispanic	Count Hispanic	Any Hispanic	Any Hispanic
	Female	Female	Female	Female	Female	Female
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.126	-0.197	0.010	0.001	0.005	-0.002
	(0.161)	(0.174)	(0.013)	(0.013)	(0.012)	(0.012)
Constant	$\stackrel{1.315^{*}}{(0.587)}$	-0.146 (0.492)	0.065 (0.044)	-0.064 (0.066)	$\stackrel{\circ}{0.057}^{+}$ $\stackrel{\circ}{(0.034)}$	-0.066 (0.057)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	1,656	1,656	1,656	1,656	1,656	1,656
	0.002	0.004	0.008	0.016	0.007	0.015

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Hispanic Male 3.8

Table 19: Effect on Hispanic Male Speakers

	% Hispanic Male	% Hispanic Male	Count Hispanic Male	Count Hispanic Male	Any Hispanic Male	Any Hispanio Male
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.199	0.242	0.000	-0.019	-0.020	-0.030
	(0.391)	(0.402)	(0.044)	(0.044)	(0.025)	(0.025)
Constant	4.194**	3.450*	0.647***	0.209	0.446***	0.200^{+}
	(1.352)	(1.719)	(0.130)	(0.199)	(0.076)	(0.109)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.009	0.008	0.013	0.019	0.020	0.025

Clustered standard errors at department level in parentheses. $^+p < 0.1; \,^*p < 0.05; \,^{**}p < 0.01; \,^{***}p < 0.001$

Discipline Subgroup Analysis

4.0.1 Chemistry (N=271)

Table 20: Chemistry: Effect on URM Speaker Representation

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.287 (1.181)	-0.531 (1.167)	-0.141 (0.166)	-0.206 (0.165)	0.028 (0.052)	0.009 (0.055)
Constant	6.404* (2.648)	-2.294 (5.808)	$0.914^* \ (0.412)$	-0.769 (0.778)	0.179 (0.120)	-0.364 (0.259)
Controls N Adjusted R^2	Simple 271 -0.028	Extended 271 -0.023	Simple 271 0.092	Extended 271 0.097	Simple 271 0.095	Extended 271 0.102

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Table 21: Chemistry: Effect on Black Speaker Representation

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.599 (1.051)	0.268 (0.846)	-0.004 (0.121)	-0.000 (0.101)	0.068 (0.065)	0.041 (0.060)
Constant	2.511 (2.539)	-8.666* (3.863)	0.336 (0.243)	-1.537*** (0.534)	$\begin{pmatrix} 0.137 \\ (0.154) \end{pmatrix}$	-0.900*** (0.297)
Controls N Adjusted R^2	Simple 271 -0.033	Extended 271 -0.014	Simple 271 0.039	Extended 271 0.076	Simple 271 0.034	Extended 271 0.082

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Table 22: Chemistry: Effect on Hispanic Speaker Representation

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	-0.244	-0.754	-0.149	-0.225 ⁺	-0.104 ⁺	-0.141*
	(0.968)	(0.979)	(0.114)	(0.123)	(0.061)	(0.061)
Constant	3.058^{+}	4.161	0.545	0.508	0.211	0.153
	(1.807)	(4.909)	(0.360)	(0.543)	(0.156)	(0.297)
Controls N Adjusted R^2	Simple 271 -0.026	Extended 271 -0.024	Simple 271 0.043	Extended 271 0.068	Simple 271 0.032	Extended 271 0.052

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

4.0.2 Mathematics (N=811)

Table 23: Mathematics: Effect on URM Speaker Representation

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.952	1.220	0.157 ⁺	0.153	0.020	0.010
	(0.723)	(0.801)	(0.095)	(0.104)	(0.034)	(0.032)
Constant	6.297***	6.722	0.880***	0.307	0.507***	0.236
	(1.437)	(4.219)	(0.147)	(0.558)	(0.068)	(0.189)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	811	811	811	811	811	811
	0.001	-0.002	-0.000	-0.003	-0.011	-0.001

Clustered standard errors at department level in parentheses. $^+p < 0.1; ^*p < 0.05; ^{**}p < 0.01; ^{***}p < 0.001$

Table 24: Mathematics: Effect on Black Speaker Representation

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.213 (0.393)	0.504 (0.428)	0.074 (0.049)	0.109* (0.054)	0.016 (0.029)	0.024 (0.026)
Constant	0.913^{+} (0.534)	1.800 (2.399)	0.198** (0.072)	0.347 (0.262)	0.173*** (0.051)	$0.066 \\ (0.150)$
Controls N Adjusted \mathbb{R}^2	Simple 811 0.010	Extended 811 0.019	Simple 811 0.009	Extended 811 0.022	Simple 811 0.003	Extended 811 0.017

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Table 25: Mathematics: Effect on Hispanic Speaker Representation

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	0.757	0.720	0.088	0.044	0.026	0.008
	(0.640)	(0.686)	(0.074)	(0.072)	(0.034)	(0.036)
Constant	5.309***	4.770	0.664***	-0.076	0.402***	0.203
	(1.408)	(3.409)	(0.136)	(0.439)	(0.080)	(0.198)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	811	811	811	811	811	811
	-0.004	-0.003	-0.001	0.002	-0.002	-0.001

Clustered standard errors at department level in parentheses. $^+p<0.1;\,^*p<0.05;\,^{**}p<0.01;\,^{***}p<0.001$

4.0.3 Physics (N=350)

Table 26: Physics: Effect on URM Speaker Representation

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.230 (1.230)	0.305 (1.179)	0.159 (0.133)	0.133 (0.132)	-0.005 (0.060)	0.001 (0.053)
Constant	$1\dot{4}.006^{***}$ (2.417)	8.049 (13.134)	1.272*** (0.167)	1.378 (1.510)	0.430*** (0.073)	0.831 (0.559)
Controls N Adjusted R^2	Simple 350 -0.001	Extended 350 -0.009	Simple 350 0.006	Extended 350 0.013	Simple 350 0.003	Extended 350 0.029

Clustered standard errors at department level in parentheses. $^+p < 0.1; \,^*p < 0.05; \,^{**}p < 0.01; \,^{***}p < 0.001$

Table 27: Physics: Effect on Black Speaker Representation

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	1.431* (0.610)	1.588* (0.618)	0.175* (0.068)	0.186** (0.069)	0.124* (0.048)	0.132** (0.050)
Constant	0.296 (0.616)	-0.493 (4.537)	0.053 (0.081)	$0.245 \\ (0.642)$	0.022 (0.053)	0.033 (0.437)
Controls N Adjusted R^2	Simple 350 -0.001	Extended 350 -0.003	Simple 350 0.022	Extended 350 0.012	Simple 350 0.015	Extended 350 0.020

Clustered standard errors at department level in parentheses. $^+p < 0.1; \,^*p < 0.05; \,^{**}p < 0.01; \,^{***}p < 0.001$

Table 28: Physics: Effect on Hispanic Speaker Representation

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	-1.201	-1.284	-0.016	-0.053	-0.063	-0.062
	(1.209)	(1.196)	(0.116)	(0.119)	(0.065)	(0.060)
Constant	13.710***	8.542	1.219***	1.133	0.437***	0.766
	(2.404)	(12.043)	(0.153)	(1.276)	(0.081)	(0.581)
Controls N Adjusted R^2	Simple 350 -0.002	Extended 350 -0.013	Simple 350 -0.008	Extended 350 0.013	Simple 350 -0.002	Extended 350 0.008

Clustered standard errors at department level in parentheses. $^+p<0.1;\,^*p<0.05;\,^{**}p<0.01;\,^{***}p<0.001$

4.0.4 Computer Science (N=142)

Table 29: Computer Science: Effect on URM Speaker Representation

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	2.529 ⁺	2.932 ⁺	0.113	0.079	0.110	0.109
	(1.323)	(1.732)	(0.154)	(0.211)	(0.091)	(0.094)
Constant	7.667*** (1.824)	12.539 (12.270)	1.462*** (0.310)	4.042** (1.464)	0.882*** (0.186)	2.540*** (0.674)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	142	142	142	142	142	142
	0.057	0.104	0.092	0.080	0.081	0.100

Clustered standard errors at department level in parentheses. $^+p<0.1;\,^*p<0.05;\,^{**}p<0.01;\,^{***}p<0.001$

Table 30: Computer Science : Effect on Black Speaker Representation

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.382	-0.051	-0.043	-0.060	-0.018	-0.042
	(0.678)	(0.669)	(0.065)	(0.073)	(0.055)	(0.067)
Constant	4.467**	1.582	0.745***	2.020*	0.603***	1.437*
	(1.552)	(9.001)	(0.218)	(0.931)	(0.155)	(0.696)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	142	142	142	142	142	142
	-0.022	-0.058	0.052	0.033	0.051	0.026

Clustered standard errors at department level in parentheses. $^+p < 0.1; \,^*p < 0.05; \,^{**}p < 0.01; \,^{***}p < 0.001$

Table 31: Computer Science: Effect on Hispanic Speaker Representation

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	2.147	2.983 ⁺	0.156	0.139	0.136	0.156 ⁺
	(1.412)	(1.733)	(0.137)	(0.181)	(0.096)	(0.089)
Constant	3.200	10.957	0.716*	2.022^{+}	0.589**	2.245**
	(2.091)	(10.855)	(0.289)	(1.098)	(0.224)	(0.704)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	142	142	142	142	142	142
	0.047	0.113	0.042	0.028	0.066	0.088

Clustered standard errors at department level in parentheses.

4.0.5 Mechanical Engineering (N=82)

Table 32: Mechanical Engineering: Effect on URM Speaker Representation

	% URM (1)	% URM (2)	Count URM (3)	$\begin{array}{c} \text{Count URM} \\ (4) \end{array}$	Any URM (5)	Any URM (6)
Treatment	3.433 ⁺ (1.998)	3.004 (1.939)	0.612* (0.292)	0.762* (0.350)	0.057 (0.113)	0.080 (0.126)
Constant	14.686* (5.796)	3.479 (10.441)	2.184* (0.918)	2.258 (2.200)	0.703* (0.269)	0.419 (0.567)
Controls N Adjusted R^2	Simple 82 0.020	Extended 82 0.010	Simple 82 0.011	Extended 82 0.132	Simple 82 0.020	Extended 82 0.021

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^**p < 0.01; \ ^***p < 0.001$

Table 33: Mechanical Engineering: Effect on Black Speaker Representation

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	3.515***	2.751**	0.586**	0.523*	0.292**	0.283**
	(0.993)	(0.894)	(0.185)	(0.205)	(0.091)	(0.094)
Constant	7.647** (2.371)	7.606 (4.930)	0.858*** (0.191)	0.622 (1.707)	0.738*** (0.176)	0.770^{+} (0.460)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	82	82	82	82	82	82
	0.131	0.138	0.111	0.163	0.135	0.174

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Table 34: Mechanical Engineering: Effect on Hispanic Speaker Representation

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	-0.082 (1.869)	0.253 (1.894)	0.026 (0.216)	0.239 (0.227)	-0.050 (0.122)	0.004 (0.132)
Constant	7.039 (4.326)	-4.127 (10.326)	1.326 (0.839)	1.636 (1.453)	0.495^{+} (0.274)	0.086 (0.613)
Controls N Adjusted R^2	Simple 82 -0.068	Extended 82 -0.084	Simple 82 -0.011	Extended 82 0.064	Simple 82 -0.018	Extended 82 -0.005

Clustered standard errors at department level in parentheses. $^+p < 0.1; *p < 0.05; **p < 0.01; ***p < 0.001$

p < 0.1; p < 0.05; p < 0.01; p < 0.01; p < 0.001

Semester-Specific Analysis **5**

5.1 Fall Semester

Table 35: Fall: Effect on URM Speakers

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.949	0.859	0.078 ⁺	0.049	0.033	0.020
	(0.695)	(0.687)	(0.046)	(0.044)	(0.025)	(0.025)
Constant	$\hat{6}.357^{**}$ (2.449)	-2.483 (3.059)	0.538*** (0.145)	-0.283 (0.212)	0.366*** (0.070)	-0.058 (0.111)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	1,448	1,448	1,448	1,448	1,448	1,448
	0.018	0.026	0.024	0.040	0.023	0.035

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Table 36: Fall: Effect on Black Speakers

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.494	0.456	0.053*	0.050*	0.043**	0.042*
	(0.333)	(0.334)	(0.021)	(0.021)	(0.017)	(0.017)
Constant	2.863** (0.987)	-1.651 (1.434)	$0.224^{***} $ (0.061)	-0.075 (0.097)	$0.172^{***} (0.046)$	-0.067 (0.080)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	1,448	1,448	1,448	1,448	1,448	1,448
	0.023	0.037	0.033	0.046	0.028	0.041

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^**p < 0.01; \ ^***p < 0.001$

Table 37: Fall: Effect on Hispanic Speakers

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanio (6)
Treatment	0.437 (0.635)	0.371 (0.657)	0.024 (0.038)	-0.003 (0.038)	0.009 (0.024)	-0.006 (0.025)
Constant	3.351 (2.358)	-1.075 (2.931)	0.301* (0.134)	-0.231 (0.188)	0.236** (0.073)	-0.066 (0.109)
Controls N Adjusted R^2	Simple 1,448 0.011	Extended 1,448 0.010	Simple 1,448 0.020	Extended 1,448 0.030	Simple 1,448 0.022	Extended 1,448 0.028

Clustered standard errors at department level in parentheses. $^+p<0.1;\,^*p<0.05;\,^{**}p<0.01;\,^{***}p<0.001$

Spring Semester 5.2

Table 38: Spring: Effect on URM Speakers

		-	~	-		
	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.573	0.569	0.006	0.006	-0.010	-0.012
	(0.735)	(0.745)	(0.055)	(0.056)	(0.028)	(0.028)
Constant	8.888***	9.945**	0.988***	0.919***	0.546***	0.438***
	(1.847)	(3.098)	(0.144)	(0.248)	(0.072)	(0.120)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,397	1,397	1,397	1,397	1,397	1,397
Adjusted R^2	0.001	0.000	0.020	0.017	0.022	0.023

Clustered standard errors at department level in parentheses. $^+p < 0.1; *p < 0.05; **p < 0.01; ***p < 0.001$

Table 39: Spring: Effect on Black Speakers

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.716	0.701	0.028	0.030	0.019	0.021
	(0.469)	(0.444)	(0.035)	(0.034)	(0.023)	(0.023)
Constant	2.050* (1.030)	1.753 (1.736)	0.321*** (0.086)	0.306* (0.148)	0.237*** (0.058)	0.184^{+} (0.102)
Controls N Adjusted R^2	Simple	Extended	Simple	Extended	Simple	Extended
	1,397	1,397	1,397	1,397	1,397	1,397
	0.008	0.007	0.030	0.031	0.020	0.019

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Table 40: Spring: Effect on Hispanic Speakers

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment Constant	-0.122 (0.611) 6.620*** (1.684)	-0.117 (0.636) 7.974** (2.846)	-0.021 (0.040) 0.650*** (0.115)	-0.024 (0.040) 0.592** (0.190)	-0.030 (0.026) 0.425*** (0.073)	-0.033 (0.026) 0.346** (0.107)
Controls N Adjusted R^2	Simple 1,397 -0.006	Extended 1,397 -0.006	Simple 1,397 0.006	Extended 1,397 0.008	Simple 1,397 0.012	Extended 1,397 0.015

Clustered standard errors at department level in parentheses. $^+p < 0.1; \,^*p < 0.05; \,^{**}p < 0.01; \,^{***}p < 0.001$

Heterogeneity Analysis 6

6.1 Moderation by Department Ranking

Table 41: Effect by Department Rank

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.644	0.639	0.088	0.051	0.018	0.007
Constant	(0.516) 9.759*** (1.635)	(0.515) 6.148** (1.990)	(0.066) 1.128*** (0.178)	(0.064) 0.341 (0.257)	(0.025) 0.531*** (0.078)	(0.023) 0.232^* (0.109)
Dept Ranking (centered)	0.016	0.028*	-0.003*	-0.001	-0.002**	-0.001
${\it Treatment} \times {\it Dept Ranking (centered)}$	(0.013) 0.007 (0.016)	(0.013) 0.007 (0.016)	(0.001) $0.005*$ (0.002)	(0.001) $0.005**$ (0.002)	(0.001) 0.001 (0.001)	(0.001) 0.001 (0.001)
Controls N	Simple 1,656	Extended 1,656	Simple 1,656	Extended 1,656	Simple 1,656	Extended 1,656
Adjusted R^2	0.012	0.014	0.031	0.039	0.031	0.041

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Moderation by Total Faculty Size 6.2

Table 42: Effect by Faculty Size

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.867 (0.535)	0.671 (0.515)	0.063 (0.069)	0.055 (0.065)	0.007 (0.025)	0.010 (0.023)
Constant	8.467*** (1.590)	3.811^{+} (2.139)	1.161*** (0.180)	0.353 (0.296)	0.575*** (0.070)	0.246* (0.113)
Total Faculty (centered)	-0.037 (0.026)	-0.029 (0.026)	0.004 (0.003)	0.003 (0.003)	0.001 (0.001)	-0.001 (0.001)
${\it Treatment} \times {\it Total Faculty (centered)}$	0.027 (0.029)	0.016 (0.029)	-0.001 (0.003)	-0.003 (0.003)	0.001 (0.001)	0.001 (0.001)
Controls N Adjusted \mathbb{R}^2	Simple 1,656 0.011	Extended 1,656 0.014	Simple 1,656 0.028	Extended 1,656 0.035	Simple 1,656 0.028	Extended 1,656 0.039

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

Moderation by URM Faculty in Peer Departments 6.3

Table 43: Effect by Peer URM Faculty

	% URM	% URM	Count URM	Count URM	Any URM	Any URM
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.694	0.624	0.091	0.056	0.017	0.008
	(0.521)	(0.520)	(0.065)	(0.064)	(0.024)	(0.023)
Constant	8.435***	7.800***	1.135***	0.824***	0.577***	0.434***
	(1.569)	(1.795)	(0.168)	(0.235)	(0.069)	(0.099)
Peer URM Faculty (centered)	0.059	0.127^{*}	0.016**	0.019**	0.007**	0.006*
,	(0.054)	(0.055)	(0.005)	(0.006)	(0.002)	(0.002)
Treatment × Peer URM Faculty (centered)	-0.064	-0.054	-0.004	-0.005	-0.001	-0.001
,	(0.073)	(0.072)	(0.008)	(0.008)	(0.003)	(0.003)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.010	0.014	0.033	0.035	0.035	0.039

Clustered standard errors at department level in parentheses. $^+p < 0.1; \ ^*p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001$

7 Summary of All Significant Results

Table 44: All Significant Results (p < 0.1) from All Analyses (Excluding Constant Term)

Analysis	Outcome	Variable	Model	Coef.	SE	t-stat	p-value Sig.
Discipline Analysis							
Chemistry Chemistry Computer Science Computer Science Computer Science Mathematics Mathematics Mechanical Engineering Mechanical Engineering Mechanical Engineering Mechanical Engineering Mechanical Engineering Physics	Any Hispanic Count Hispanic % Hispanic % URM Any Hispanic Count Black Count URM % Black % URM Any Black Count Black Count URM % Black	Treatment	Extended Extended Simple Extended Simple Extended Simple Simple Simple Simple Simple Extended Extended	-0.2251 2.9825 2.5293 0.1556 0.1093 0.1570 3.5151 3.4328 0.2919 0.5865 0.7615 1.5883	0.1229 1.7330 1.3234 0.0892 0.0540 0.0947 0.9928 1.9981 0.0914 0.1852 0.3497 0.6182	-1.831 1.721 1.911 1.745 2.024 1.658 3.540 1.718 3.192 3.167 2.178 2.569	0.0219 * 0.0682 + 0.0879 + 0.0583 + 0.0836 + 0.0433 * 0.0978 + 0.0007 *** 0.0906 + 0.0022 ** 0.0023 ** 0.0106 * 0.0002 **
Physics Physics	Any Black Count Black	Treatment Treatment	Extended Extended	0.1322 0.1862	0.0504 0.0693	2.620 2.686	0.0092 ** 0.0076 **
Identity Analysis							
Demographic Subgroup Demographic Subgroup Demographic Subgroup Demographic Subgroup Demographic Subgroup Demographic Subgroup Demographic Subgroup Demographic Subgroup	% Black % Black Female % Black Male Any Black Any Black Female Any Black Male Count Black Count Black	Treatment Treatment Treatment Treatment Treatment Treatment Treatment Treatment Treatment	Extended Extended Extended Simple Extended Simple Extended Extended	0.1265 0.4842 0.0480 0.0134 0.0523 0.0746	0.0226	2.079 1.726 1.952 2.126 1.660 2.340 1.989 1.980	0.0378 * 0.0846 + 0.0511 + 0.0337 * 0.0970 + 0.0194 * 0.0469 * 0.0478 *
Moderation Analysis							
Department Rank	Count URM	$\begin{array}{l} {\rm Treatment} \times {\rm Dept} \\ {\rm Ranking} \end{array}$	Extended	0.0049	0.0019	2.650	0.0081 **
Semester Analysis							
Fall Semester Fall Semester Fall Semester	Any Black Count Black Count URM	Treatment Treatment Treatment	Simple Simple	0.0531	0.0167 0.0209 0.0456	2.603 2.541 1.711	0.0093 ** 0.0112 * 0.0873 +

Note: Significance levels: + p<0.1; * p<0.05; ** p<0.01; *** p<0.001. SE = Clustered standard errors at department level. Constant terms are excluded from this summary.

7.1 Exploratory Analysis: Seniority Moderation

7.1.1 Analysis 1: Does speaker seniority moderate the treatment effect?

8 Exploratory Analysis: Seniority Moderation

8.1 Distribution of Years Since PhD

Seniority Data Coverage:

• Total seminars with seniority data: 1627 (98.2% of total)

• Number of departments: 523

• Mean of seminar-level mean years since PhD: 15.7 (SD = 7.5)

• Median of seminar-level mean years since PhD: 15.1

 $\bullet\,$ Range of seminar means: 1.0 to 59.0 years

• IQR of seminar means: 10.5 to 19.9 years

8.2 Continuous Moderation Analysis

We test whether the average seniority of speakers in a seminar moderates the treatment effect on Black speaker representation.

Note: Seniority is measured as the mean years since PhD for speakers in each seminar.

8.2.1 Outcome: Percentage Black Speakers

Table 45: Seniority Moderation Analysis: Percentage Black Speakers

	(1) Main Effects	(2) Interaction	(3) With Controls
Treatment	0.7693*	0.7858*	0.8519**
	(0.3360)	(0.3442)	(0.3273)
Years Since PhD (centered)	-0.0156	-0.0033	-0.0034
	(0.0187)	(0.0232)	(0.0231)
Treatment \times Years Since PhD		-0.0267	-0.0321
		(0.0381)	(0.0382)
Observations	1627	1627	1627
R-squared	0.004	0.005	0.016
Controls	No	No	Yes

Note: Clustered standard errors at department level in parentheses. Years since PhD is the mean years since PhD for speakers in each seminar, centered at the median. Controls include department ranking, total faculty, and fraction URM faculty. Significance: + p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001.

8.2.2 Outcome: Any Black Speakers

Table 46: Seniority Moderation Analysis: Any Black Speakers

	(1) Main Effects	(2) Interaction	(3) With Controls
Treatment	0.0573* (0.0238)	0.0551* (0.0239)	0.0632** (0.0235)
Years Since PhD (centered)	0.0003 (0.0013)	-0.0013 (0.0016)	-0.0013 (0.0016)
Treatment \times Years Since PhD	(0.0010)	0.0035 (0.0027)	0.0032 (0.0027)
Observations	1627	1627	1627
R-squared	0.005	0.006	0.013
Controls	No	No	Yes

Note: Clustered standard errors at department level in parentheses. Years since PhD is the mean years since PhD for speakers in each seminar, centered at the median. Controls include department ranking, total faculty, and fraction URM faculty. Significance: + p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001.

8.3 Subgroup Analysis: Seminars with Senior vs Junior Speakers

Median Split Groups:

- Seminars with junior speakers (n=815): Mean = 10.0 years, Range = 1.0-15.1 years
- Seminars with senior speakers (n=812): Mean = 21.5 years, Range = 15.1-59.0 years

8.3.1 Outcome: Percentage Black Speakers

Table 47: Subgroup Analysis by Seniority: Percentage Black Speakers

	Seminars with Junior Speakers		Seminars with Senior Speakers	
	(1)	(2)	(3)	(4)
	Simple	With Controls	Simple	With Controls
Treatment	1.0131*	1.1295*	0.4977	0.5375
	(0.4793)	(0.4811)	(0.4165)	(0.4002)
Observations	815	815	812	812
R-squared	0.006	0.022	0.002	0.010
Controls	No	Yes	No	Yes

Note: Clustered standard errors at department level in parentheses. Junior/Senior split at median of seminar-level mean years since PhD. Controls include department ranking, total faculty, and fraction URM faculty. Significance: + p < 0.1; * p < 0.05; *** p < 0.01; *** p < 0.001.

Test for Difference Between Groups:

Difference in treatment effect (Senior - Junior): -0.5154 (SE = 0.5984), p = 0.3892

8.3.2 Outcome: Any Black Speakers

Table 48: Subgroup Analysis by Seniority: Any Black Speakers

		- •		
	Seminars with Junior Speakers		Seminars with Senior Speakers	
	(1)	(2)	(3)	(4)
	Simple	With Controls	Simple	With Controls
Treatment	0.0273	0.0384	0.0849*	0.0868*
	(0.0300)	(0.0303)	(0.0342)	(0.0341)
Observations	815	815	812	812
R-squared	0.001	0.006	0.009	0.019
Controls	No	Yes	No	Yes

Note: Clustered standard errors at department level in parentheses. Junior/Senior split at median of seminar-level mean years since PhD. Controls include department ranking, total faculty, and fraction URM faculty. Significance: + p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001.

Test for Difference Between Groups:

Difference in treatment effect (Senior - Junior): 0.0577 (SE = 0.0437), p = 0.1871

8.4 Exploratory Analysis: Discipline Moderation

8.4.1 Analysis 2: Does academic discipline moderate the treatment effect?

9 Exploratory Analysis: Discipline Moderation

9.1 Distribution Across Disciplines

Table 49: Sample Distribution by Discipline

Discipline	Seminars	Departments	Treatment	Control	% of Total
Mathematics	811	134	381	430	49.0%
Physics	350	125	181	169	21.1%
Chemistry	271	123	144	127	16.4%
Computer Science	142	82	66	76	8.6%
Mechanical Engineering	82	66	39	43	5.0%
Total	1656	530	811	845	100.0%

9.2 Full Interaction Model

We estimate the following model where treatment effects vary by discipline:

$$Y_{it} = \beta_0 + \sum_d \beta_{1d} \cdot \text{Treatment}_i \times \text{Discipline}_d + \sum_d \beta_{2d} \cdot \text{Discipline}_d + \epsilon_{it}$$

9.2.1 Outcome: Percentage Black Speakers

Table 50: Treatment Effects by Discipline: Percentage Black Speakers

	v i	0	<u> </u>
	(1)	(2)	(3)
	Pooled Effect	By Discipline	With Controls
Treatment Effects			
Pooled	0.6816*		
	(0.3104)		
Physics		1.4040*	1.4338*
v		(0.6165)	(0.6437)
Mathematics		$0.2479^{'}$	$0.3371^{'}$
		(0.4093)	(0.4050)
Chemistry		0.3708	0.1699
		(1.0355)	(0.9852)
MAE		3.9953***	3.6238**
		(1.2023)	(1.2158)
Computer Science		0.0499	0.2937
		(0.8294)	(0.8247)
Observations	1656	1656	1656
R-squared	0.027	0.032	0.038
Controls	No	No	Yes

Note: Clustered standard errors at department level in parentheses. Computer Science is the reference category. MAE = Mechanical Engineering. Controls include department ranking, total faculty, and fraction URM faculty. Significance: + p < 0.1; *p < 0.05; **p < 0.01; *** p < 0.001.

Wald Tests: Pairwise Comparisons of Treatment Effects

Table 51: Pairwise Comparisons of Discipline-Specific Treatment Effects

Comparison	Difference (SE)	p-value
Physics - Mathematics	$1.0968 \ (0.7569)$	0.1474
Physics - Chemistry	$1.2640 \ (1.1829)$	0.2853
Physics - MAE	-2.1900 (1.3680)	0.1094
Physics - Computer Science	$1.1401\ (1.0588)$	0.2816
Mathematics - Chemistry	$0.1672\ (1.0713)$	0.8760
Mathematics - MAE	-3.2867 (1.2901)	0.0108*
Mathematics - Computer Science	$0.0433 \ (0.9278)$	0.9628
Chemistry - MAE	-3.4539 (1.5687)	0.0277*
Chemistry - Computer Science	-0.1239 (1.3108)	0.9247
MAE - Computer Science	$3.3300 \ (1.4762)$	0.0241*

Note: Based on Model 3 with controls. Positive values indicate the first discipline has a larger treatment effect. Significance: + p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001.

9.2.2 Outcome: Any Black Speakers

Table 52: Treatment Effects by Discipline: Any Black Speakers

Table 32. Treatment Energy by Elselphine. This Black speakers				
	(1)	(2)	(3)	
	Pooled Effect	By Discipline	With Controls	
Treatment Effects				
Pooled	0.0510*			
	(0.0224)			
Physics		0.0940+	0.0973*	
1 11,0100		(0.0481)	(0.0487)	
Mathematics		$0.0233^{'}$	$0.0309^{'}$	
		(0.0294)	(0.0299)	
Chemistry		0.0466	0.0385	
		(0.0682)	(0.0672)	
MAE		0.3220***	0.3104**	
		(0.0962)	(0.0978)	
Computer Science		-0.0459	-0.0314	
		(0.0710)	(0.0718)	
Observations	1656	1656	1656	
R-squared	0.035	0.042	0.044	
Controls	No	No	Yes	

Note: Clustered standard errors at department level in parentheses. Computer Science is the reference category. MAE = Mechanical Engineering. Controls include department ranking, total faculty, and fraction URM faculty. Significance: + p < 0.1; * p < 0.05; *** p < 0.01; *** p < 0.001.

Wald Tests: Pairwise Comparisons of Treatment Effects

Table 53: Pairwise Comparisons of Discipline-Specific Treatment Effects

Comparison	Difference (SE)	p-value
Physics - Mathematics	$0.0664 \ (0.0570)$	0.2437
Physics - Chemistry	$0.0587 \ (0.0827)$	0.4777
Physics - MAE	-0.2131 (0.1086)	0.0496*
Physics - Computer Science	$0.1286 \ (0.0874)$	0.1412
Mathematics - Chemistry	-0.0077 (0.0737)	0.9171
Mathematics - MAE	-0.2795 (0.1018)	0.0061**
Mathematics - Computer Science	$0.0622 \ (0.0776)$	0.4223
Chemistry - MAE	-0.2718 (0.1184)	0.0216*
Chemistry - Computer Science	$0.0699 \ (0.0991)$	0.4807
MAE - Computer Science	$0.3418 \ (0.1213)$	0.0048**

Note: Based on Model $\overline{3}$ with controls. Positive values indicate the first discipline has a larger treatment effect. Significance: + p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001.

9.3 Summary of Exploratory Analyses

Key Findings:

- 1. **Seniority Moderation:** We examined whether the treatment effect varies by speaker seniority (years since PhD). The continuous moderation analysis tests for a linear interaction between treatment and years since PhD, while the subgroup analysis compares effects for junior vs senior speakers (split at median).
- 2. **Discipline Moderation:** We tested whether treatment effects differ across the five academic disciplines in our sample. The full interaction model allows each discipline to have its own treatment effect, and pairwise Wald tests examine whether these differences are statistically significant.

Note: These are exploratory analyses not pre-registered in our analysis plan. Results should be interpreted with appropriate caution regarding multiple testing.