

# Search Costs Field Experiment

2025-06-24

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# 1 Summary Statistics

## 1.1 Overall Summary Statistics

### 1.1.1 Seminar Speaker Demographics

Table 1: Overall Seminar Statistics

Statistic	Value
Number of seminars	1654
Number of unique departments	527
Total speakers across all seminars	23202
Mean speakers per seminar	14.03
SD speakers per seminar	9.90
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	7.48	11.37	1.00	1.27	54.0
Black	2.20	5.90	0.31	0.68	23.2
Hispanic	5.25	9.87	0.68	1.01	42.7
Female	16.84	16.00	2.39	2.47	76.2

Note: N = 1654 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	34.1	18.1
% URM faculty	4.09	4.41
% Women faculty	20.40	7.59

Note: N = 527 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	270	122	14.5	10.9
Computer Science	142	82	13.1	10.3
Mathematics	812	134	13.3	9.1
Mechanical Engineering	81	65	13.0	10.2
Physics	349	124	15.9	10.4

Table 5: Seminar Speaker Demographics by Discipline: URM

Discipline	N Seminars	Mean %	SD %	Mean Count	Pct. Has Any
Chemistry	270	8.92	10.48	1.27	64.8
Computer Science	142	4.45	8.22	0.54	35.9
Mathematics	812	7.15	11.26	0.92	49.8
Mechanical Engineering	81	8.20	9.17	1.12	61.7
Physics	349	8.20	13.45	1.11	61.0

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

Discipline	Black		Hispanic		Female	
	Mean %	Pct. Any	Mean %	Pct. Any	Mean %	Pct. Any
Chemistry	4.21	39.3	4.61	45.6	23.52	86.7
Computer Science	1.55	17.6	2.89	23.9	19.23	78.2
Mathematics	1.73	19.2	5.40	40.6	13.80	70.7
Mechanical Engineering	2.95	28.4	5.25	46.9	19.87	77.8
Physics	1.82	20.9	6.37	51.9	17.06	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

Discipline	N Depts	Faculty Size		% URM Faculty		% Women Faculty	
		Mean	SD	Mean	SD	Mean	SD
Chemistry	122	28.6	11.9	4.76	4.47	24.40	7.18
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	65	36.4	19.1	5.57	5.48	19.70	7.61
Physics	124	32.1	16.5	4.02	4.91	17.62	6.54

Note: Department faculty demographics based on 2024 coding.

## 1.3 Summary Statistics by Semester

Table 8: Summary Statistics by Semester

Semester (N)	Mean %	URM		Black		Hispanic	
		Mean Count	Pct. Any	Mean %	Pct. Any	Mean %	Pct. Any
Fall (1448)	7.08	0.53	36.3	1.72	11.7	5.34	28.9
Spring (1390)	7.60	0.63	41.4	2.62	18.2	4.96	29.4
Semester	Mean %	Female		Total Speakers			
		Mean Count	Pct. Any	Mean	SD		
Fall	16.12	1.27	61.9	7.75	5.50		
Spring	17.49	1.52	64.6	8.62	6.85		

## 2 Main Effects Analysis

### 2.1 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	0.806 (0.531)	0.777 (0.519)	0.104 (0.066)	0.083 (0.064)	0.021 (0.025)	0.015 (0.023)
Constant	7.399*** (1.652)	3.161 (2.109)	1.050*** (0.168)	0.143 (0.275)	0.553*** (0.067)	0.194 <sup>+</sup> (0.115)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.010	0.016	0.030	0.039	0.029	0.042

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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

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	-0.448 (0.548)	-0.425 (0.546)	0.104 (0.066)	0.083 (0.064)	-0.552 (0.522)	-0.508 (0.521)
Constant	17.051*** (1.288)	13.669*** (2.446)	1.050*** (0.168)	0.143 (0.275)	16.001*** (1.198)	13.526*** (2.282)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.032	0.055	0.030	0.039	0.031	0.056

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 2.3 Seemingly Unrelated Regression (SUR) Analysis

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

Outcome	Coefficient	SE
URM Speakers	0.1043	(0.0628)
Non-URM Speakers	-0.5520	(0.4601)
Sum of Effects	-0.4477	—

*Wald Test:  $H_0$ : 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

#### 3.1 Black Speakers

Table 12: Effect on Black Speakers

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.671* (0.305)	0.658* (0.289)	0.085* (0.039)	0.084* (0.038)	0.057* (0.023)	0.056* (0.022)
Constant	2.495** (0.758)	0.714 (1.276)	0.415*** (0.100)	0.095 (0.166)	0.274*** (0.059)	0.042 (0.104)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.027	0.032	0.048	0.056	0.036	0.045

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

#### 3.2 Hispanic Speakers

Table 13: Effect on Hispanic Speakers

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	0.149 (0.479)	0.125 (0.484)	0.019 (0.049)	-0.004 (0.048)	-0.014 (0.025)	-0.024 (0.025)
Constant	4.692** (1.538)	2.230 (1.908)	0.610*** (0.141)	0.012 (0.214)	0.414*** (0.069)	0.145 (0.106)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.004	0.005	0.014	0.020	0.020	0.025

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

#### 3.3 Female Speakers

Table 14: Effect on Female Speakers

	% Female (1)	% Female (2)	Count Female (3)	Count Female (4)	Any Female (5)	Any Female (6)
Treatment	-0.034 (0.830)	-0.511 (0.820)	-0.070 (0.128)	-0.134 (0.127)	0.002 (0.022)	-0.002 (0.022)
Constant	21.549*** (2.110)	13.522*** (3.859)	3.600*** (0.334)	2.200*** (0.588)	0.874*** (0.061)	0.714*** (0.099)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.054	0.061	0.084	0.099	0.016	0.024

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$



### 3.4 URM Female

Table 15: Effect on URM Female Speakers

	% URM Female (1)	% URM Female (2)	Count URM Female (3)	Count URM Female (4)	Any URM Female (5)	Any URM Female (6)
Treatment	-0.027 (0.175)	-0.084 (0.187)	0.018 (0.018)	0.012 (0.019)	0.011 (0.016)	0.006 (0.016)
Constant	1.647** (0.597)	0.002 (0.577)	0.178** (0.059)	-0.011 (0.090)	0.148** (0.047)	-0.022 (0.075)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.012	0.017	0.037	0.046	0.038	0.045

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

### 3.5 Black Female

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	0.137* (0.067)	0.147* (0.070)	0.011 (0.009)	0.012 (0.009)	0.013 (0.008)	0.014 <sup>+</sup> (0.008)
Constant	0.436** (0.145)	0.014 (0.266)	0.054* (0.024)	0.008 (0.042)	0.042* (0.020)	0.008 (0.036)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.032	0.036	0.020	0.024	0.017	0.021

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

### 3.6 Black Male

Table 17: Effect on Black Male Speakers

	% Black Male (1)	% Black Male (2)	Count Black Male (3)	Count Black Male (4)	Any Black Male (5)	Any Black Male (6)
Treatment	0.534* (0.262)	0.511* (0.246)	0.075* (0.034)	0.073* (0.032)	0.060** (0.022)	0.059** (0.022)
Constant	2.060** (0.681)	0.700 (1.144)	0.353*** (0.088)	0.083 (0.140)	0.264*** (0.058)	0.026 (0.102)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.019	0.023	0.041	0.049	0.035	0.044

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

### 3.7 Hispanic Female

Table 18: Effect on Hispanic Female Speakers

	% Hispanic Female (1)	% Hispanic Female (2)	Count Hispanic Female (3)	Count Hispanic Female (4)	Any Hispanic Female (5)	Any Hispanic Female (6)
Treatment	-0.169 (0.166)	-0.238 (0.180)	0.005 (0.013)	-0.001 (0.013)	0.002 (0.012)	-0.003 (0.012)
Constant	1.187* (0.586)	-0.056 (0.490)	0.060 (0.045)	-0.048 (0.066)	0.054 (0.035)	-0.051 (0.057)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.001	0.002	0.006	0.011	0.005	0.010

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

### 3.8 Hispanic Male

Table 19: Effect on Hispanic Male Speakers

	% Hispanic Male (1)	% Hispanic Male (2)	Count Hispanic Male (3)	Count Hispanic Male (4)	Any Hispanic Male (5)	Any Hispanic Male (6)
Treatment	0.318 (0.410)	0.363 (0.412)	0.016 (0.044)	-0.001 (0.043)	-0.010 (0.025)	-0.020 (0.025)
Constant	3.505** (1.356)	2.286 (1.677)	0.547*** (0.117)	0.052 (0.184)	0.409*** (0.069)	0.148 (0.107)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.006	0.007	0.014	0.021	0.021	0.026

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 4 Discipline Subgroup Analysis

### 4.0.1 Chemistry (N=270)

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	0.543 (1.161)	-0.167 (1.163)	-0.092 (0.164)	-0.160 (0.165)	0.021 (0.052)	0.002 (0.057)
Constant	5.885* (2.654)	-2.063 (5.826)	0.890* (0.406)	-0.765 (0.775)	0.193 (0.131)	-0.307 (0.266)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	270	270	270	270	270	270
Adjusted $R^2$	-0.022	-0.018	0.103	0.108	0.104	0.113

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	0.776 (1.054)	0.413 (0.847)	0.025 (0.121)	0.025 (0.100)	0.094 (0.065)	0.063 (0.059)
Constant	2.137 (2.554)	-8.825* (3.937)	0.301 (0.243)	-1.600** (0.533)	0.107 (0.155)	-0.960** (0.296)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	270	270	270	270	270	270
Adjusted $R^2$	-0.033	-0.015	0.043	0.080	0.046	0.097

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	-0.168 (0.972)	-0.539 (1.005)	-0.130 (0.115)	-0.206 (0.126)	-0.096 (0.062)	-0.129* (0.064)
Constant	2.915 (1.784)	4.555 (4.914)	0.557 (0.359)	0.576 (0.548)	0.232 (0.160)	0.241 (0.306)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	270	270	270	270	270	270
Adjusted $R^2$	-0.017	-0.018	0.049	0.073	0.040	0.057

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

#### 4.0.2 Mathematics (N=812)

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	1.141 (0.782)	1.423 <sup>+</sup> (0.815)	0.181 <sup>+</sup> (0.094)	0.185 <sup>+</sup> (0.101)	0.027 (0.034)	0.021 (0.032)
Constant	5.177*** (1.374)	4.628 (4.326)	0.740*** (0.125)	-0.052 (0.526)	0.456*** (0.061)	0.156 (0.187)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	812	812	812	812	812	812
Adjusted $R^2$	-0.005	-0.004	0.001	0.000	-0.011	-0.003

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	0.209 (0.384)	0.510 (0.422)	0.081 (0.050)	0.120* (0.055)	0.022 (0.029)	0.034 (0.027)
Constant	0.664 (0.483)	1.430 (2.383)	0.186** (0.069)	0.331 (0.262)	0.160** (0.050)	0.042 (0.150)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	812	812	812	812	812	812
Adjusted $R^2$	0.012	0.023	0.011	0.025	0.006	0.021

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	0.950 (0.707)	0.917 (0.714)	0.104 (0.072)	0.066 (0.069)	0.033 (0.033)	0.019 (0.036)
Constant	4.437*** (1.293)	3.043 (3.512)	0.536*** (0.103)	-0.420 (0.390)	0.367*** (0.069)	0.148 (0.185)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	812	812	812	812	812	812
Adjusted $R^2$	-0.009	-0.005	-0.001	0.003	-0.004	-0.003

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

#### 4.0.3 Physics (N=349)

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	0.352 (1.192)	0.238 (1.150)	0.176 (0.132)	0.154 (0.130)	0.002 (0.060)	0.003 (0.052)
Constant	13.468*** (2.392)	7.147 (13.731)	1.252*** (0.170)	1.565 (1.444)	0.408*** (0.073)	0.880 (0.564)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	349	349	349	349	349	349
Adjusted $R^2$	0.005	-0.001	0.005	0.005	0.004	0.026

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	1.482* (0.606)	1.606** (0.615)	0.176* (0.068)	0.184** (0.070)	0.124* (0.048)	0.129* (0.050)
Constant	-0.213 (0.409)	-0.041 (4.611)	0.032 (0.082)	0.246 (0.648)	0.001 (0.052)	0.029 (0.444)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	349	349	349	349	349	349
Adjusted $R^2$	0.001	-0.003	0.020	0.009	0.012	0.014

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	-1.129 (1.179)	-1.368 (1.175)	0.000 (0.114)	-0.030 (0.117)	-0.060 (0.064)	-0.062 (0.059)
Constant	13.680*** (2.389)	7.188 (12.651)	1.221*** (0.151)	1.319 (1.192)	0.436*** (0.080)	0.785 (0.579)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	349	349	349	349	349	349
Adjusted $R^2$	-0.000	-0.006	-0.007	0.004	0.002	0.007

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

#### 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	2.222 (1.368)	2.694 (1.770)	0.087 (0.162)	0.072 (0.212)	0.124 (0.090)	0.118 (0.093)
Constant	7.242*** (1.945)	15.917 (13.334)	1.405*** (0.327)	4.106** (1.445)	0.908*** (0.184)	2.446*** (0.658)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	142	142	142	142	142	142
Adjusted $R^2$	0.035	0.082	0.078	0.069	0.107	0.132

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	0.203 (0.698)	-0.178 (0.713)	-0.057 (0.064)	-0.065 (0.072)	-0.018 (0.055)	-0.042 (0.067)
Constant	4.152** (1.454)	3.617 (9.859)	0.703*** (0.207)	2.104* (0.917)	0.603*** (0.155)	1.437* (0.696)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	142	142	142	142	142	142
Adjusted $R^2$	-0.041	-0.076	0.042	0.027	0.051	0.026

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	2.020 (1.459)	2.872 (1.749)	0.145 (0.144)	0.137 (0.182)	0.150 (0.096)	0.165 <sup>+</sup> (0.089)
Constant	3.091 (2.198)	12.299 (11.220)	0.702* (0.302)	2.002 <sup>+</sup> (1.068)	0.615** (0.221)	2.150** (0.690)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	142	142	142	142	142	142
Adjusted $R^2$	0.045	0.110	0.044	0.035	0.102	0.128

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

#### 4.0.5 Mechanical Engineering (N=81)

Table 32: Mechanical Engineering : Effect on URM Speaker Representation

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	3.859 <sup>+</sup> (2.026)	2.959 (2.002)	0.665* (0.300)	0.731 <sup>+</sup> (0.370)	0.113 (0.116)	0.107 (0.130)
Constant	17.140** (5.984)	0.793 (11.347)	2.618** (0.963)	1.814 (2.267)	0.792** (0.279)	0.316 (0.597)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	81	81	81	81	81	81
Adjusted $R^2$	0.039	0.055	0.033	0.133	-0.002	-0.009

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	3.942*** (0.999)	2.942** (0.937)	0.646*** (0.185)	0.551* (0.210)	0.346*** (0.090)	0.310** (0.097)
Constant	8.540** (2.526)	6.694 (5.016)	0.966*** (0.149)	0.498 (1.711)	0.818*** (0.174)	0.679 (0.466)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	81	81	81	81	81	81
Adjusted $R^2$	0.153	0.170	0.129	0.185	0.157	0.196

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

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	-0.083 (1.897)	0.017 (1.900)	0.019 (0.227)	0.181 (0.244)	-0.034 (0.122)	0.006 (0.132)
Constant	8.600 <sup>+</sup> (4.526)	-5.901 (11.026)	1.652 <sup>+</sup> (0.926)	1.316 (1.569)	0.585* (0.291)	0.036 (0.645)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	81	81	81	81	81	81
Adjusted $R^2$	-0.053	-0.041	0.025	0.067	-0.015	0.001

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 4.1 Testing for Significant Moderation Across Disciplines

**F-test for Treatment  $\times$  Discipline Interactions (Black Speakers):** F-statistic: 3.707 p-value: 0.0052  
Degrees of freedom: 4

The treatment effect on Black speaker representation varies significantly across disciplines ( $p < 0.05$ ). This indicates that the diversity intervention has heterogeneous effects depending on the academic field.

**F-test for Treatment  $\times$  Discipline Interactions (URM Speakers):** F-statistic: 0.583 p-value: 0.6753  
Degrees of freedom: 4

**F-test for Treatment  $\times$  Discipline Interactions (% Black Speakers):** F-statistic: 2.528 p-value: 0.039  
Degrees of freedom: 4

**F-test for Treatment  $\times$  Discipline Interactions (Total Black Speakers):** F-statistic: 4.104 p-value: 0.0026 Degrees of freedom: 4

**Individual Interaction Effects (Black Speakers):**

	Estimate	Std. Error	t value	Pr(> t )
treatment:disc_mathematics	-0.0659	0.0603	-1.0923	0.2749
treatment:disc_physics	0.0183	0.0683	0.2673	0.7893
treatment:disc_computer_science	-0.1134	0.0876	-1.2945	0.1957
treatment:disc_mechanical_engineering	0.2740	0.1055	2.5961	0.0095

## 5 Semester-Specific Analysis

### 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	0.944 (0.694)	0.853 (0.687)	0.078 <sup>+</sup> (0.046)	0.049 (0.044)	0.033 (0.025)	0.020 (0.025)
Constant	6.369** (2.448)	-2.473 (3.058)	0.544*** (0.145)	-0.276 (0.212)	0.366*** (0.070)	-0.058 (0.111)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,448	1,448	1,448	1,448	1,448	1,448
Adjusted $R^2$	0.017	0.026	0.023	0.040	0.023	0.035

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Table 36: Fall: Effect on Black Speakers

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.472 (0.331)	0.432 (0.332)	0.053* (0.021)	0.050* (0.021)	0.043** (0.017)	0.042* (0.017)
Constant	2.819** (0.985)	-1.717 (1.425)	0.224*** (0.061)	-0.075 (0.097)	0.172*** (0.046)	-0.067 (0.080)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,448	1,448	1,448	1,448	1,448	1,448
Adjusted $R^2$	0.023	0.037	0.033	0.046	0.028	0.041

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Table 37: Fall: Effect on Hispanic Speakers

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	0.455 (0.636)	0.390 (0.659)	0.024 (0.038)	-0.003 (0.038)	0.011 (0.024)	-0.004 (0.025)
Constant	3.408 (2.362)	-0.999 (2.932)	0.307* (0.134)	-0.224 (0.188)	0.238** (0.073)	-0.063 (0.109)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,448	1,448	1,448	1,448	1,448	1,448
Adjusted $R^2$	0.011	0.010	0.020	0.029	0.022	0.028

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$



## 5.2 Spring Semester

Table 38: Spring: Effect on URM Speakers

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.666 (0.768)	0.811 (0.804)	0.028 (0.055)	0.035 (0.056)	-0.005 (0.028)	-0.002 (0.028)
Constant	6.394*** (1.627)	7.010* (2.849)	0.808*** (0.135)	0.715** (0.235)	0.483*** (0.068)	0.379** (0.118)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,390	1,390	1,390	1,390	1,390	1,390
Adjusted $R^2$	0.008	0.009	0.025	0.022	0.027	0.030

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Table 39: Spring: Effect on Black Speakers

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.887 <sup>+</sup> (0.454)	0.918* (0.428)	0.039 (0.035)	0.042 (0.034)	0.029 (0.023)	0.031 (0.023)
Constant	1.614 <sup>+</sup> (0.971)	1.420 (1.651)	0.297*** (0.083)	0.287* (0.143)	0.212*** (0.053)	0.159 (0.097)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,390	1,390	1,390	1,390	1,390	1,390
Adjusted $R^2$	0.013	0.013	0.032	0.034	0.024	0.024

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Table 40: Spring: Effect on Hispanic Speakers

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	-0.200 (0.672)	-0.093 (0.719)	-0.010 (0.040)	-0.007 (0.040)	-0.029 (0.027)	-0.028 (0.027)
Constant	4.557** (1.387)	5.362* (2.532)	0.493*** (0.102)	0.406* (0.173)	0.358*** (0.067)	0.292** (0.105)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,390	1,390	1,390	1,390	1,390	1,390
Adjusted $R^2$	-0.004	-0.002	0.006	0.007	0.014	0.016

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6 Heterogeneity Analysis

### 6.1 Moderation by Department Ranking

### 6.2 URM Speakers

Table 41: Effect on URM Speakers: Moderation by Department Ranking

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.757 (0.519)	0.770 (0.515)	0.104 (0.065)	0.075 (0.063)	0.022 (0.025)	0.013 (0.023)
Constant	8.877*** (1.644)	4.995* (1.961)	1.017*** (0.174)	0.203 (0.245)	0.502*** (0.072)	0.183+ (0.107)
Department Ranking	0.022+ (0.013)	0.035** (0.013)	-0.003** (0.001)	-0.001 (0.001)	-0.001** (0.001)	-0.001 (0.001)
Treatment $\times$ Department Ranking	0.006 (0.016)	0.005 (0.016)	0.005** (0.002)	0.005** (0.002)	0.001+ (0.001)	0.001+ (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.013	0.016	0.035	0.044	0.033	0.043

Clustered standard errors at department level in parentheses.

+ $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

### 6.3 BLACK Speakers

Table 42: Effect on Black Speakers: Moderation by Department Ranking

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.655* (0.303)	0.652* (0.286)	0.083* (0.039)	0.081* (0.037)	0.058* (0.022)	0.055* (0.022)
Constant	2.960*** (0.801)	1.284 (1.129)	0.466*** (0.111)	0.158 (0.147)	0.246*** (0.063)	0.038 (0.095)
Department Ranking	0.005 (0.007)	0.010 (0.008)	-0.000 (0.001)	0.000 (0.001)	-0.001* (0.000)	-0.000 (0.001)
Treatment $\times$ Department Ranking	0.006 (0.009)	0.004 (0.009)	0.003* (0.001)	0.002* (0.001)	0.001+ (0.001)	0.001+ (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.027	0.032	0.052	0.060	0.038	0.046

Clustered standard errors at department level in parentheses.

+ $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.4 HISPANIC Speakers

Table 43: Effect on Hispanic Speakers: Moderation by Department Ranking

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	0.118 (0.472)	0.124 (0.482)	0.021 (0.049)	-0.008 (0.048)	-0.013 (0.025)	-0.025 (0.025)
Constant	5.640*** (1.564)	3.427 <sup>+</sup> (1.841)	0.515*** (0.150)	0.001 (0.201)	0.380*** (0.073)	0.145 (0.100)
Department Ranking	0.016 (0.011)	0.024* (0.011)	-0.003** (0.001)	-0.001 (0.001)	-0.001 <sup>+</sup> (0.001)	-0.000 (0.001)
Treatment × Department Ranking	0.000 (0.014)	0.001 (0.014)	0.002 <sup>+</sup> (0.001)	0.003* (0.001)	0.001 (0.001)	0.001 (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.005	0.005	0.017	0.022	0.021	0.025

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.5 Moderation by Total Faculty Size

## 6.6 URM Speakers

Table 44: Effect on URM Speakers: Moderation by Total Faculty

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	1.043 <sup>+</sup> (0.537)	0.816 (0.514)	0.088 (0.068)	0.080 (0.064)	0.015 (0.025)	0.016 (0.023)
Constant	7.211*** (1.537)	2.085 (2.020)	1.033*** (0.176)	0.146 (0.281)	0.531*** (0.067)	0.171 (0.110)
Total Faculty	-0.051 <sup>+</sup> (0.026)	-0.040 (0.026)	0.002 (0.003)	0.001 (0.003)	0.000 (0.001)	-0.001 (0.001)
Treatment × Total Faculty	0.042 (0.029)	0.028 (0.029)	-0.000 (0.003)	-0.002 (0.003)	0.001 (0.001)	0.001 (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.011	0.016	0.030	0.038	0.030	0.042

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.7 BLACK Speakers

Table 45: Effect on Black Speakers: Moderation by Total Faculty

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.767* (0.307)	0.652* (0.285)	0.092* (0.041)	0.080* (0.037)	0.057* (0.023)	0.054* (0.022)
Constant	2.584*** (0.761)	0.074 (1.300)	0.449*** (0.100)	0.024 (0.169)	0.289*** (0.062)	0.005 (0.103)
Total Faculty	-0.014 (0.010)	-0.014 (0.010)	-0.000 (0.001)	-0.000 (0.002)	0.001 (0.001)	-0.000 (0.001)
Treatment × Total Faculty	0.003 (0.014)	-0.004 (0.014)	-0.002 (0.002)	-0.003 <sup>+</sup> (0.002)	-0.001 (0.001)	-0.002 (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.027	0.032	0.048	0.057	0.036	0.046

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.8 HISPANIC Speakers

Table 46: Effect on Hispanic Speakers: Moderation by Total Faculty

	% Hispanic	% Hispanic	Count Hispanic	Count Hispanic	Any Hispanic	Any Hispanic
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.281 (0.487)	0.168 (0.480)	-0.006 (0.049)	-0.002 (0.048)	-0.023 (0.025)	-0.021 (0.025)
Constant	4.421** (1.497)	1.834 (1.781)	0.555*** (0.152)	0.093 (0.208)	0.378*** (0.070)	0.175 (0.107)
Total Faculty	-0.035 (0.026)	-0.025 (0.026)	0.003 (0.003)	0.001 (0.003)	0.000 (0.001)	-0.000 (0.001)
Treatment $\times$ Total Faculty	0.037 (0.027)	0.030 (0.027)	0.002 (0.003)	0.001 (0.003)	0.002 (0.001)	0.002 (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.004	0.006	0.017	0.020	0.023	0.025

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.9 Moderation by URM Faculty in Peer Departments

### 6.10 URM Speakers

Table 47: Effect on URM Speakers: Moderation by Peer URM Faculty

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.808 (0.528)	0.759 (0.520)	0.108 <sup>+</sup> (0.064)	0.080 (0.063)	0.022 (0.024)	0.014 (0.023)
Constant	7.283*** (1.591)	6.890*** (1.819)	1.004*** (0.162)	0.739*** (0.223)	0.534*** (0.064)	0.400*** (0.096)
Peer URM Faculty	0.052 (0.054)	0.135* (0.054)	0.017** (0.005)	0.021*** (0.006)	0.007** (0.002)	0.007** (0.002)
Treatment × Peer URM Faculty	-0.051 (0.072)	-0.038 (0.071)	-0.005 (0.008)	-0.006 (0.008)	-0.001 (0.003)	-0.001 (0.003)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.009	0.016	0.036	0.039	0.037	0.041

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

### 6.11 BLACK Speakers

Table 48: Effect on Black Speakers: Moderation by Peer URM Faculty

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.674* (0.302)	0.659* (0.286)	0.086* (0.039)	0.085* (0.037)	0.058** (0.023)	0.058* (0.022)
Constant	2.460** (0.751)	2.126* (0.967)	0.406*** (0.099)	0.345* (0.140)	0.263*** (0.059)	0.209* (0.083)
Peer URM Faculty	0.013 (0.023)	0.041 (0.029)	0.003 (0.003)	0.007 <sup>+</sup> (0.004)	0.003 (0.002)	0.003 (0.002)
Treatment × Peer URM Faculty	-0.005 (0.037)	0.003 (0.037)	0.000 (0.005)	0.001 (0.005)	0.002 (0.003)	0.003 (0.003)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.026	0.032	0.048	0.056	0.041	0.045

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.12 HISPANIC Speakers

Table 49: Effect on Hispanic Speakers: Moderation by Peer URM Faculty

	% Hispanic	% Hispanic	Count Hispanic	Count Hispanic	Any Hispanic	Any Hispanic
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.149 (0.478)	0.105 (0.487)	0.021 (0.048)	-0.007 (0.048)	-0.012 (0.025)	-0.024 (0.025)
Constant	4.608** (1.477)	4.461* (1.736)	0.572*** (0.135)	0.349+ (0.188)	0.401*** (0.068)	0.284** (0.086)
Peer URM Faculty	0.040 (0.050)	0.093+ (0.052)	0.014*** (0.004)	0.014** (0.005)	0.005* (0.002)	0.005+ (0.003)
Treatment $\times$ Peer URM Faculty	-0.047 (0.063)	-0.043 (0.064)	-0.005 (0.006)	-0.006 (0.006)	-0.000 (0.003)	-0.001 (0.003)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.003	0.005	0.021	0.020	0.024	0.024

Clustered standard errors at department level in parentheses.

+ $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

### **6.13 Moderation by % Female Email Recipients**

#### **6.14 URM Speakers**

**Error:** Moderator variable 'pct\_female\_recipients' not found in dataset.\\

#### **6.15 BLACK Speakers**

**Error:** Moderator variable 'pct\_female\_recipients' not found in dataset.\\

#### **6.16 HISPANIC Speakers**

**Error:** Moderator variable 'pct\_female\_recipients' not found in dataset.\\



### **6.17 Moderation by % URM Email Recipients**

#### **6.18 URM Speakers**

**Error:** Moderator variable 'pct\_urm\_recipients' not found in dataset.\\

#### **6.19 BLACK Speakers**

**Error:** Moderator variable 'pct\_urm\_recipients' not found in dataset.\\

#### **6.20 HISPANIC Speakers**

**Error:** Moderator variable 'pct\_urm\_recipients' not found in dataset.\\

## 6.21 Moderation by % URM Faculty in Department

## 6.22 URM Speakers

Table 50: Effect on URM Speakers: Moderation by % URM Faculty

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	-0.425 (0.746)	-0.255 (0.738)	-0.025 (0.093)	-0.040 (0.092)	0.009 (0.034)	0.001 (0.033)
Constant	7.478*** (1.655)	3.562 <sup>+</sup> (2.074)	1.057*** (0.170)	0.191 (0.272)	0.556*** (0.067)	0.199 <sup>+</sup> (0.116)
% URM Faculty	-8.383 (9.756)	-6.528 (9.705)	-0.794 (1.213)	-0.982 (1.156)	-0.146 (0.546)	-0.320 (0.508)
Treatment $\times$ % URM Faculty	32.301* (15.556)	28.599 <sup>+</sup> (15.306)	3.379 <sup>+</sup> (1.965)	3.406 <sup>+</sup> (1.938)	0.310 (0.664)	0.367 (0.647)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.012	0.018	0.032	0.041	0.028	0.042

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.23 BLACK Speakers

Table 51: Effect on Black Speakers: Moderation by % URM Faculty

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.013 (0.361)	0.074 (0.361)	-0.001 (0.050)	0.005 (0.050)	0.020 (0.031)	0.021 (0.030)
Constant	2.465** (0.774)	0.941 (1.286)	0.420*** (0.103)	0.126 (0.164)	0.273*** (0.059)	0.056 (0.104)
% URM Faculty	-0.958 (4.641)	-0.954 (4.652)	-0.562 (0.629)	-0.603 (0.615)	-0.124 (0.425)	-0.245 (0.402)
Treatment $\times$ % URM Faculty	16.768* (8.342)	16.191 <sup>+</sup> (8.278)	2.255* (1.086)	2.208* (1.024)	0.946 (0.586)	0.994 <sup>+</sup> (0.565)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.031	0.034	0.051	0.059	0.037	0.046

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.24 HISPANIC Speakers

Table 52: Effect on Hispanic Speakers: Moderation by % URM Faculty

	% Hispanic	% Hispanic	Count Hispanic	Count Hispanic	Any Hispanic	Any Hispanic
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.447 (0.743)	-0.342 (0.743)	-0.032 (0.081)	-0.054 (0.081)	0.007 (0.036)	-0.004 (0.036)
Constant	4.798** (1.548)	2.411 (1.897)	0.612*** (0.143)	0.031 (0.215)	0.416*** (0.070)	0.137 (0.108)
% URM Faculty	-7.376 (8.658)	-5.611 (8.457)	-0.321 (0.973)	-0.480 (0.937)	0.007 (0.515)	-0.067 (0.496)
Treatment $\times$ % URM Faculty	16.104 (15.089)	12.950 (14.903)	1.334 (1.718)	1.394 (1.748)	-0.534 (0.669)	-0.548 (0.661)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.003	0.005	0.014	0.020	0.020	0.025

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.25 Moderation by % Women Faculty in Department

## 6.26 URM Speakers

Table 53: Effect on URM Speakers: Moderation by % Women Faculty

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	1.495 (1.529)	1.844 (1.497)	0.184 (0.200)	0.145 (0.198)	0.106 (0.073)	0.081 (0.069)
Constant	5.751** (1.946)	2.882 (2.154)	0.915*** (0.218)	0.127 (0.279)	0.468*** (0.084)	0.176 (0.118)
% Women Faculty	8.003 (5.031)	8.087 (4.932)	0.680 (0.726)	0.693 (0.708)	0.457 (0.281)	0.492 <sup>+</sup> (0.264)
Treatment $\times$ % Women Faculty	-4.051 (7.405)	-5.416 (7.163)	-0.447 (1.013)	-0.317 (0.982)	-0.454 (0.356)	-0.338 (0.336)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.010	0.016	0.030	0.038	0.030	0.042

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.27 BLACK Speakers

Table 54: Effect on Black Speakers: Moderation by % Women Faculty

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.228 (0.782)	0.442 (0.746)	0.050 (0.112)	0.058 (0.107)	0.040 (0.068)	0.042 (0.067)
Constant	2.108* (0.850)	0.770 (1.305)	0.359** (0.117)	0.102 (0.166)	0.238** (0.073)	0.046 (0.105)
% Women Faculty	1.350 (2.742)	1.715 (2.603)	0.220 (0.381)	0.273 (0.353)	0.144 (0.250)	0.193 (0.232)
Treatment $\times$ % Women Faculty	2.053 (4.337)	1.094 (3.966)	0.155 (0.614)	0.133 (0.567)	0.073 (0.343)	0.073 (0.331)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.026	0.032	0.047	0.056	0.036	0.045

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

## 6.28 HISPANIC Speakers

Table 55: Effect on Hispanic Speakers: Moderation by % Women Faculty

	% Hispanic	% Hispanic	Count Hispanic	Count Hispanic	Any Hispanic	Any Hispanic
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	1.228 (1.366)	1.372 (1.373)	0.130 (0.149)	0.082 (0.149)	0.099 (0.073)	0.063 (0.073)
Constant	3.379 <sup>+</sup> (1.809)	1.904 (1.956)	0.515 <sup>**</sup> (0.177)	-0.011 (0.223)	0.337 <sup>***</sup> (0.081)	0.122 (0.109)
% Women Faculty	6.834 (4.339)	6.551 (4.266)	0.520 (0.537)	0.479 (0.547)	0.446 <sup>+</sup> (0.255)	0.425 (0.260)
Treatment $\times$ % Women Faculty	-5.861 (6.261)	-6.330 (6.223)	-0.588 (0.703)	-0.438 (0.699)	-0.589 <sup>+</sup> (0.337)	-0.442 (0.340)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,654	1,654	1,654	1,654	1,654	1,654
Adjusted $R^2$	0.004	0.005	0.014	0.020	0.021	0.025

Clustered standard errors at department level in parentheses.

<sup>+</sup> $p < 0.1$ ; <sup>\*</sup> $p < 0.05$ ; <sup>\*\*</sup> $p < 0.01$ ; <sup>\*\*\*</sup> $p < 0.001$

## **6.29 Moderation by Number of Distinct Seminars**

### **6.30 URM Speakers**

**Error:** Moderator variable 'num\_distinct\_seminars' not found in dataset.\\

### **6.31 BLACK Speakers**

**Error:** Moderator variable 'num\_distinct\_seminars' not found in dataset.\\

### **6.32 HISPANIC Speakers**

**Error:** Moderator variable 'num\_distinct\_seminars' not found in dataset.\\

## 6.33 Junior vs Senior Speaker Analysis

### 6.33.1 Analysis: Treatment effects on representation by speaker career stage

This analysis examines whether the treatment differentially affects the representation of junior versus senior speakers. We define: - **Junior speakers**: Those below the median years since PhD completion - **Senior speakers**: Those above the median years since PhD completion

We analyze treatment effects on three types of outcomes for each demographic group (URM, Black, Hispanic):  
 1. **Percentage**: What percentage of speakers from a demographic group are junior (or senior)?  
 2. **Count**: How many speakers from a demographic group are junior (or senior)?  
 3. **Binary**: Does the seminar have any junior (or senior) speakers from this demographic group?

## 6.34 Seniority Data Coverage

Total seminars analyzed: 1654\ [0.3em] Seminars with junior speakers: 1518 (91.8%)\ [0.3em] Seminars with senior speakers: 1537 (92.9%)\ [0.3em] Mean junior speakers per seminar: 5.99\ [0.3em] Mean senior speakers per seminar: 5.88\ [0.3em] Median years since PhD (cutoff): 12.0\ [0.5em]

## 6.35 URM Speakers by Career Stage

Table 56: Treatment Effects on Junior and Senior URM Speakers

Outcome	Junior Speakers		Senior Speakers	
	Model 1	Model 2	Model 1	Model 2
% of speakers	0.9617	0.5704	0.6797	0.8575
Count	0.0634	0.0454	-0.0236	-0.0207
Any (0/1)	0.0247	0.0133	-0.0117	-0.0068
<i>Mean (Control)</i>				
% of speakers	6.775		5.946	
Count	0.406		0.400	
Any (0/1)	0.299		0.285	

Note: + p<0.1; \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. Standard errors clustered at the department level. Junior speakers are defined as those below the median years since PhD; senior speakers are above the median. Model 1 includes baseline controls; Model 2 adds extended controls.

## 6.36 Black Speakers by Career Stage

Table 57: Treatment Effects on Junior and Senior Black Speakers

Outcome	Junior Speakers		Senior Speakers	
	Model 1	Model 2	Model 1	Model 2
% of speakers	0.8015+	0.6425	0.4454	0.5024
Count	0.0449*	0.0450*	0.0076	0.0071
Any (0/1)	0.0399*	0.0401*	0.0147	0.0148
<i>Mean (Control)</i>				
% of speakers	2.007		1.261	
Count	0.110		0.109	
Any (0/1)	0.094		0.086	

Note: + p<0.1; \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. Standard errors clustered at the department level. Junior speakers are defined as those below the median years since PhD; senior speakers are above the median. Model 1 includes baseline controls; Model 2 adds extended controls.

## 6.37 Hispanic Speakers by Career Stage

Table 58: Treatment Effects on Junior and Senior Hispanic Speakers

Outcome	Junior Speakers		Senior Speakers	
	Model 1	Model 2	Model 1	Model 2
% of speakers	0.1317	-0.1187	0.2343	0.3551
Count	0.0170	-0.0029	-0.0312	-0.0278
Any (0/1)	-0.0077	-0.0205	-0.0178	-0.0134
<i>Mean (Control)</i>				
% of speakers	4.755		4.686	
Count	0.294		0.292	
Any (0/1)	0.233		0.224	

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . Standard errors clustered at the department level. Junior speakers are defined as those below the median years since PhD; senior speakers are above the median. Model 1 includes baseline controls; Model 2 adds extended controls.



## 7 Summary of All Significant Results



Table 59: All Significant Results ( $p < 0.1$ ) from All Analyses

Analysis	Outcome		Variable	Model	Coef.	SE	t-stat	p-value	Sig.
Career Stage Analysis									
Junior/Senior Speakers	Black	Junior Any (0/1)	Treatment	Simple	0.0399	0.0159	2.502	0.0125	*
Junior/Senior Speakers	Black	Junior Count	Treatment	Simple	0.0449	0.0201	2.232	0.0257	*
Junior/Senior Speakers	Black	Junior							
Demographic Subgroups									
Demographic Subgroup	% Black		Treatment	Extended	0.6576	0.2888	2.277	0.0229	*
Demographic Subgroup	% Black Female		Treatment	Extended	0.1465	0.0698	2.098	0.0360	*
Demographic Subgroup	% Black Male		Treatment	Extended	0.5111	0.2461	2.077	0.0380	*
Demographic Subgroup	Any Black		Treatment	Extended	0.0565	0.0224	2.517	0.0119	*
Demographic Subgroup	Any Black Fe- male		Treatment	Extended	0.0144	0.0081	1.778	0.0756	+
Demographic Subgroup	Any Black Male		Treatment	Simple	0.0601	0.0224	2.682	0.0074	**
Demographic Subgroup	Count Black		Treatment	Extended	0.0844	0.0375	2.249	0.0247	*
Demographic Subgroup	Count Black Male		Treatment	Extended	0.0733	0.0324	2.261	0.0239	*
Discipline Analysis									
Chemistry	Any Hispanic		Treatment	Extended	-0.1288	0.0641	-2.009	0.0456	*
Computer Science	Any Hispanic		Treatment	Extended	0.1648	0.0886	1.860	0.0655	+
Mathematics	% URM		Treatment	Extended	1.4230	0.8152	1.746	0.0813	+
Mathematics	Count Black		Treatment	Extended	0.1199	0.0546	2.195	0.0284	*
Mathematics	Count URM		Treatment	Simple	0.1806	0.0939	1.923	0.0548	+
Mechanical Engineering	% Black		Treatment	Simple	3.9420	0.9989	3.946	0.0002	***
Mechanical Engineering	% URM		Treatment	Simple	3.8590	2.0259	1.905	0.0613	+
Mechanical Engineering	Any Black		Treatment	Simple	0.3462	0.0898	3.855	0.0003	***
Mechanical Engineering	Count Black		Treatment	Simple	0.6458	0.1853	3.486	0.0009	***
Mechanical Engineering	Count URM		Treatment	Simple	0.6652	0.2998	2.219	0.0301	*
Physics	% Black		Treatment	Extended	1.6060	0.6155	2.609	0.0095	**
Physics	Any Black		Treatment	Simple	0.1244	0.0480	2.589	0.0100	*
Physics	Count Black		Treatment	Extended	0.1840	0.0695	2.646	0.0085	**
Heterogeneity Analysis									
Department Ranking	Any Black	Treatment × Depart- ment Ranking	Department Ranking	Simple	0.0010	0.0006	1.733	0.0833	+
Department Ranking	Any URM	Treatment × Depart- ment Ranking	Department Ranking	Extended	0.0012	0.0006	1.876	0.0608	+
Department Ranking	Count Black	Treatment × Depart- ment Ranking	Department Ranking	Simple	0.0025	0.0012	2.184	0.0291	*
Department Ranking	Count Hispanic	Treatment × Depart- ment Ranking	Department Ranking	Extended	0.0027	0.0012	2.245	0.0249	*
Department Ranking	Count URM	Treatment × Depart- ment Ranking	Department Ranking	Extended	0.0053	0.0018	2.975	0.0030	**
Total Faculty	Count Black	Treatment × Total Fac- ulty	Total Faculty	Extended	-0.0031	0.0018	-1.692	0.0908	+