

# Search Costs Field Experiment

2025-06-02

## Contents

<b>1</b>	<b>Summary Statistics</b>	<b>3</b>
1.1	Overall Summary Statistics . . . . .	3
1.1.1	Seminar Speaker Demographics . . . . .	3
1.1.2	Department Faculty Demographics . . . . .	3
1.2	Summary Statistics by Discipline . . . . .	3
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
<b>2</b>	<b>Main Effects Analysis</b>	<b>5</b>
2.1	Main Question 1: URM Speaker Representation . . . . .	5
2.2	Main Questions 2a-2c: Effects on Speaker Counts . . . . .	6
2.3	Seemingly Unrelated Regression (SUR) Analysis . . . . .	6
<b>3</b>	<b>Demographic Subgroup Analysis</b>	<b>7</b>
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 . . . . .	9
3.8	Hispanic Male . . . . .	9
<b>4</b>	<b>Discipline Subgroup Analysis</b>	<b>10</b>
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

<b>5 Semester-Specific Analysis</b>	<b>14</b>
5.1 Fall Semester . . . . .	14
5.2 Spring Semester . . . . .	15
<b>6 Heterogeneity Analysis</b>	<b>16</b>
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
<b>7 Summary of All Significant Results</b>	<b>19</b>

# 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	7.81	11.37	1.07	1.34	55.7
Black	2.24	5.90	0.32	0.67	23.9
Hispanic	5.55	9.70	0.75	1.09	45.2
Female	16.87	16.25	2.39	2.52	75.5

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	32.3	18.7
% URM faculty	3.97	4.42
% Women faculty	19.50	8.44

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	9.13	10.47	1.32	65.3
Computer Science	142	4.86	9.01	0.61	38.0
Mathematics	811	7.37	11.02	1.00	51.3
Mechanical Engineering	82	8.38	9.14	1.12	63.4
Physics	350	8.87	13.70	1.23	64.0

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	4.20	40.2	4.83	47.6	23.75	86.3
Computer Science	1.46	16.9	3.41	27.5	18.88	78.9
Mathematics	1.72	19.2	5.64	43.5	13.90	69.5
Mechanical Engineering	3.28	32.9	5.10	46.3	19.25	76.8
Physics	1.98	22.9	6.89	54.0	17.06	79.1

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	123	27.2	13.0	4.66	4.53	23.39	8.45
Computer Science	82	41.3	25.5	2.79	3.27	19.34	8.19
Mathematics	134	32.4	17.0	3.56	3.56	18.95	8.26
Mechanical Engineering	66	34.0	20.3	5.32	5.54	18.78	8.47
Physics	125	30.5	17.2	3.79	4.88	16.76	7.46

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)	7.44	0.57	38.5	1.74	11.9	5.68	31.0
Spring (1397)	7.99	0.68	43.1	2.66	18.3	5.30	31.9
Semester	Mean %	Female		Total Speakers			
		Mean Count	Pct. Any	Mean	SD		
Fall	16.09	1.27	61.8	7.75	5.50		
Spring	17.69	1.52	63.7	8.56	6.92		

## 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	0.743 (0.535)	0.734 (0.530)	0.093 (0.069)	0.070 (0.068)	0.014 (0.025)	0.011 (0.024)
Constant	8.189*** (1.622)	4.213* (2.007)	1.252*** (0.180)	0.354 (0.272)	0.609*** (0.069)	0.291** (0.106)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.011	0.015	0.026	0.035	0.031	0.045

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	-0.461 (0.554)	-0.502 (0.542)	0.093 (0.069)	0.070 (0.068)	-0.535 (0.523)	-0.556 (0.511)
Constant	16.810*** (1.313)	12.854*** (2.276)	1.252*** (0.180)	0.354 (0.272)	15.523*** (1.239)	12.435*** (2.133)
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	0.026	0.035	0.030	0.057

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	0.0928	(0.0663)
Non-URM Speakers	-0.5352	(0.4576)
Sum of Effects	-0.4424	—

*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	0.587 <sup>+</sup> (0.308)	0.554 <sup>+</sup> (0.293)	0.067 <sup>+</sup> (0.040)	0.062 (0.038)	0.045 <sup>+</sup> (0.023)	0.045* (0.022)
Constant	2.605** (0.831)	0.303 (1.286)	0.450*** (0.112)	0.097 (0.161)	0.285*** (0.067)	0.056 (0.104)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.027	0.034	0.049	0.058	0.042	0.051

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	0.175 (0.461)	0.198 (0.469)	0.027 (0.052)	0.008 (0.052)	-0.007 (0.025)	-0.010 (0.025)
Constant	5.384*** (1.471)	3.766* (1.777)	0.779*** (0.153)	0.236 (0.218)	0.491*** (0.069)	0.291** (0.104)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.006	0.005	0.013	0.020	0.018	0.021

Clustered standard errors at department level in parentheses.

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

#### 3.3 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	0.055 (0.828)	-0.251 (0.829)	-0.071 (0.129)	-0.137 (0.125)	-0.009 (0.021)	-0.012 (0.021)
Constant	21.840*** (2.006)	16.463*** (3.794)	3.595*** (0.343)	2.394*** (0.576)	0.854*** (0.058)	0.693*** (0.090)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.051	0.057	0.088	0.106	0.018	0.028

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	-0.052 (0.174)	-0.095 (0.188)	0.014 (0.019)	0.005 (0.019)	0.011 (0.017)	0.002 (0.017)
Constant	1.814** (0.614)	0.193 (0.607)	0.218*** (0.062)	-0.020 (0.089)	0.190*** (0.052)	-0.033 (0.076)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.014	0.019	0.042	0.060	0.045	0.062

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	0.098 (0.072)	0.102 (0.073)	0.001 (0.010)	0.001 (0.010)	0.003 (0.009)	0.003 (0.009)
Constant	0.571*** (0.173)	0.101 (0.282)	0.087** (0.027)	0.037 (0.042)	0.074** (0.024)	0.035 (0.037)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.030	0.034	0.025	0.029	0.020	0.025

Clustered standard errors at department level in parentheses.

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

### 3.6 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	0.489 <sup>+</sup> (0.263)	0.451 <sup>+</sup> (0.248)	0.065 <sup>+</sup> (0.034)	0.061 <sup>+</sup> (0.032)	0.051* (0.023)	0.050* (0.022)
Constant	2.034** (0.725)	0.202 (1.152)	0.356*** (0.094)	0.059 (0.135)	0.269*** (0.066)	0.031 (0.103)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.019	0.024	0.041	0.049	0.039	0.048

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	-0.152 (0.162)	-0.200 (0.179)	0.000 (0.013)	-0.008 (0.013)	-0.001 (0.012)	-0.009 (0.012)
Constant	1.224* (0.589)	0.070 (0.509)	0.073 (0.045)	-0.036 (0.064)	0.068 <sup>+</sup> (0.036)	-0.035 (0.056)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.001	0.003	0.004	0.016	0.004	0.016

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	0.327 (0.389)	0.399 (0.388)	0.025 (0.047)	0.015 (0.046)	-0.006 (0.025)	-0.009 (0.025)
Constant	4.160** (1.278)	3.696* (1.552)	0.705*** (0.134)	0.273 (0.188)	0.484*** (0.069)	0.283** (0.103)
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	0.008	0.014	0.020	0.019	0.022

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=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	0.550 (1.198)	-0.449 (1.224)	-0.135 (0.169)	-0.205 (0.176)	0.043 (0.054)	0.020 (0.059)
Constant	4.407 (2.964)	-0.574 (5.429)	0.789 <sup>+</sup> (0.427)	-0.527 (0.708)	0.094 (0.135)	-0.230 (0.264)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	271	271	271	271	271	271
Adjusted $R^2$	-0.023	-0.015	0.109	0.113	0.093	0.093

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	0.655 (1.047)	0.208 (0.914)	-0.015 (0.121)	-0.016 (0.111)	0.071 (0.067)	0.038 (0.068)
Constant	1.379 (2.636)	-9.402* (3.875)	0.329 (0.247)	-1.328** (0.498)	0.105 (0.162)	-0.791* (0.306)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	271	271	271	271	271	271
Adjusted $R^2$	-0.026	0.005	0.061	0.105	0.071	0.128

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	-0.013 (1.006)	-0.565 (1.034)	-0.127 (0.123)	-0.199 (0.142)	-0.075 (0.062)	-0.099 (0.064)
Constant	2.177 (1.836)	7.127 <sup>+</sup> (3.850)	0.424 (0.367)	0.645 (0.523)	0.138 (0.154)	0.295 (0.272)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	271	271	271	271	271	271
Adjusted $R^2$	-0.020	-0.020	0.048	0.067	0.025	0.037

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=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	1.183 <sup>+</sup> (0.695)	1.495 <sup>+</sup> (0.836)	0.151 (0.098)	0.148 (0.116)	0.024 (0.032)	0.014 (0.032)
Constant	5.650*** (1.270)	3.396 (4.326)	0.962*** (0.150)	0.021 (0.570)	0.505*** (0.065)	0.146 (0.191)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	811	811	811	811	811	811
Adjusted $R^2$	0.006	0.003	0.000	0.001	-0.006	0.004

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	0.252 (0.370)	0.496 (0.433)	0.064 (0.050)	0.100 <sup>+</sup> (0.058)	0.006 (0.029)	0.013 (0.027)
Constant	0.481 (0.484)	0.972 (2.345)	0.187** (0.070)	0.387 (0.267)	0.151** (0.048)	0.076 (0.148)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	811	811	811	811	811	811
Adjusted $R^2$	0.025	0.038	0.013	0.028	0.010	0.027

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 (0.617)	1.005 (0.687)	0.091 (0.078)	0.049 (0.081)	0.041 (0.034)	0.035 (0.035)
Constant	5.094*** (1.236)	2.276 (3.224)	0.756*** (0.139)	-0.401 (0.445)	0.441*** (0.073)	0.209 (0.204)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	811	811	811	811	811	811
Adjusted $R^2$	-0.004	-0.005	-0.004	0.002	-0.003	-0.002

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=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	0.195 (1.281)	0.344 (1.185)	0.211 (0.142)	0.236 <sup>+</sup> (0.141)	-0.004 (0.061)	0.010 (0.056)
Constant	14.623*** (2.277)	16.403 (13.619)	1.429*** (0.160)	3.096* (1.356)	0.549*** (0.063)	1.212* (0.576)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	350	350	350	350	350	350
Adjusted $R^2$	0.002	-0.007	0.002	0.009	0.003	0.033

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	1.260*	1.333*	0.167*	0.174*	0.130**	0.134**
	(0.627)	(0.633)	(0.068)	(0.068)	(0.049)	(0.050)
Constant	0.620	1.842	0.068	0.573	0.040	0.322
	(0.687)	(4.034)	(0.084)	(0.570)	(0.058)	(0.388)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	350	350	350	350	350	350
Adjusted $R^2$	0.003	0.001	0.013	0.009	0.010	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 28: Physics : Effect on Hispanic Speaker Representation

	% Hispanic (1)	% Hispanic (2)	Count Hispanic (3)	Count Hispanic (4)	Any Hispanic (5)	Any Hispanic (6)
Treatment	-1.065	-0.989	0.043	0.062	-0.050	-0.039
	(1.256)	(1.211)	(0.129)	(0.130)	(0.065)	(0.063)
Constant	14.003***	14.560	1.361***	2.523*	0.541***	1.086 <sup>+</sup>
	(2.319)	(12.805)	(0.146)	(1.148)	(0.074)	(0.568)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	350	350	350	350	350	350
Adjusted $R^2$	-0.000	-0.012	-0.010	0.008	0.001	0.004

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	2.285 <sup>+</sup>	2.529	0.124	0.052	0.108	0.114
	(1.377)	(1.763)	(0.153)	(0.202)	(0.095)	(0.088)
Constant	8.029***	7.913	1.463***	3.396*	0.807***	2.639***
	(1.496)	(13.562)	(0.274)	(1.449)	(0.178)	(0.702)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	142	142	142	142	142	142
Adjusted $R^2$	0.078	0.105	0.121	0.098	0.104	0.127

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	0.332	-0.138	-0.041	-0.065	-0.015	-0.049
	(0.671)	(0.645)	(0.067)	(0.068)	(0.056)	(0.062)
Constant	3.892**	-0.450	0.629**	1.496	0.487**	0.944
	(1.485)	(8.588)	(0.226)	(0.933)	(0.158)	(0.696)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	142	142	142	142	142	142
Adjusted $R^2$	-0.018	-0.048	0.026	0.018	0.029	0.015

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	1.953 (1.426)	2.667 (1.699)	0.165 (0.141)	0.117 (0.174)	0.144 (0.098)	0.156 <sup>+</sup> (0.083)
Constant	4.138* (1.791)	8.363 (10.246)	0.834*** (0.244)	1.899 <sup>+</sup> (1.009)	0.628** (0.207)	2.352*** (0.662)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	142	142	142	142	142	142
Adjusted $R^2$	0.076	0.143	0.075	0.065	0.092	0.141

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=82)

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	2.772 (1.979)	2.771 (1.876)	0.599* (0.295)	0.809* (0.349)	0.037 (0.111)	0.043 (0.127)
Constant	14.896* (5.963)	7.948 (9.914)	2.110* (0.926)	3.352 <sup>+</sup> (1.762)	0.722** (0.267)	0.566 (0.491)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	82	82	82	82	82	82
Adjusted $R^2$	0.003	-0.015	-0.013	0.090	0.016	0.034

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	2.771* (1.081)	2.238* (0.878)	0.527** (0.165)	0.536** (0.173)	0.291** (0.100)	0.286** (0.097)
Constant	7.904** (2.587)	10.798* (4.389)	0.810*** (0.222)	1.309 (1.135)	0.657** (0.197)	0.963* (0.400)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	82	82	82	82	82	82
Adjusted $R^2$	0.065	0.088	0.079	0.135	0.070	0.139

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	0.001 (1.872)	0.532 (1.855)	0.072 (0.227)	0.274 (0.244)	-0.050 (0.122)	-0.016 (0.130)
Constant	6.992 (4.310)	-2.849 (9.815)	1.300 (0.839)	2.043 (1.318)	0.495 <sup>+</sup> (0.274)	0.059 (0.552)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	82	82	82	82	82	82
Adjusted $R^2$	-0.072	-0.098	-0.027	0.022	-0.018	-0.012

Clustered standard errors at department level in parentheses.

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

## 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	1.098 (0.702)	0.977 (0.684)	0.098* (0.047)	0.073 (0.046)	0.043 <sup>+</sup> (0.025)	0.033 (0.026)
Constant	5.742* (2.441)	-2.379 (2.941)	0.515*** (0.144)	-0.205 (0.198)	0.347*** (0.070)	-0.005 (0.102)
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	0.025	0.026	0.041	0.029	0.038

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	0.427 (0.335)	0.397 (0.334)	0.049* (0.021)	0.047* (0.021)	0.038* (0.017)	0.036* (0.017)
Constant	2.565** (0.976)	-1.427 (1.369)	0.201*** (0.060)	-0.050 (0.089)	0.149*** (0.045)	-0.051 (0.075)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,448	1,448	1,448	1,448	1,448	1,448
Adjusted $R^2$	0.021	0.034	0.036	0.046	0.033	0.040

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	0.668 (0.645)	0.572 (0.647)	0.049 (0.040)	0.026 (0.040)	0.025 (0.025)	0.014 (0.025)
Constant	3.078 (2.367)	-1.066 (2.893)	0.304* (0.134)	-0.166 (0.181)	0.227** (0.074)	-0.019 (0.106)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,448	1,448	1,448	1,448	1,448	1,448
Adjusted $R^2$	0.012	0.011	0.020	0.030	0.022	0.027

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	0.426 (0.767)	0.564 (0.768)	-0.009 (0.056)	-0.007 (0.057)	-0.020 (0.027)	-0.017 (0.027)
Constant	8.928*** (1.960)	9.366** (3.009)	1.121*** (0.157)	0.940*** (0.249)	0.584*** (0.068)	0.474*** (0.109)
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	0.001	0.019	0.016	0.023	0.025

Clustered standard errors at department level in parentheses.

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

Table 39: Spring: Effect on Black Speakers

	% Black (1)	% Black (2)	Count Black (3)	Count Black (4)	Any Black (5)	Any Black (6)
Treatment	0.706 (0.458)	0.680 (0.438)	0.021 (0.035)	0.020 (0.034)	0.014 (0.023)	0.015 (0.022)
Constant	2.129* (1.070)	0.794 (1.673)	0.366*** (0.097)	0.256 <sup>+</sup> (0.147)	0.255*** (0.066)	0.155 (0.103)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,397	1,397	1,397	1,397	1,397	1,397
Adjusted $R^2$	0.009	0.011	0.031	0.035	0.024	0.028

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	-0.258 (0.644)	-0.095 (0.654)	-0.029 (0.042)	-0.027 (0.042)	-0.033 (0.026)	-0.030 (0.026)
Constant	6.582*** (1.687)	8.413** (2.662)	0.737*** (0.120)	0.670*** (0.188)	0.476*** (0.069)	0.403*** (0.100)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,397	1,397	1,397	1,397	1,397	1,397
Adjusted $R^2$	-0.006	-0.004	0.008	0.009	0.018	0.020

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

Table 41: Effect by Department Rank

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.704 (0.527)	0.730 (0.528)	0.095 (0.069)	0.067 (0.067)	0.016 (0.025)	0.010 (0.024)
Constant	9.190*** (1.636)	5.643** (1.876)	1.172*** (0.190)	0.407 <sup>+</sup> (0.245)	0.547*** (0.074)	0.277** (0.099)
Dept Ranking (centered)	0.013 (0.013)	0.026* (0.013)	-0.003* (0.001)	-0.001 (0.001)	-0.001* (0.001)	-0.001 (0.001)
Treatment $\times$ Dept Ranking (centered)	0.007 (0.017)	0.004 (0.016)	0.004 <sup>+</sup> (0.002)	0.004* (0.002)	0.001 (0.001)	0.001 (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.012	0.015	0.028	0.037	0.035	0.045

Clustered standard errors at department level in parentheses.

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



## 6.2 Moderation by Total Faculty Size

Table 42: Effect by Faculty Size

	% URM (1)	% URM (2)	Count URM (3)	Count URM (4)	Any URM (5)	Any URM (6)
Treatment	0.878 (0.552)	0.734 (0.531)	0.070 (0.072)	0.066 (0.068)	0.008 (0.026)	0.011 (0.024)
Constant	8.195*** (1.606)	3.272 (2.096)	1.263*** (0.189)	0.375 (0.290)	0.603*** (0.071)	0.265* (0.109)
Total Faculty (centered)	-0.021 (0.023)	-0.025 (0.023)	0.004 (0.003)	0.002 (0.003)	0.001 (0.001)	-0.001 (0.001)
Treatment $\times$ Total Faculty (centered)	0.008 (0.027)	0.000 (0.026)	-0.002 (0.003)	-0.003 (0.003)	0.000 (0.001)	-0.000 (0.001)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.011	0.015	0.026	0.035	0.031	0.045

Clustered standard errors at department level in parentheses.

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

### 6.3 Moderation by URM Faculty in Peer Departments

Table 43: Effect by Peer URM Faculty

	% URM	% URM	Count URM	Count URM	Any URM	Any URM
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.748 (0.528)	0.718 (0.528)	0.098 (0.068)	0.069 (0.067)	0.016 (0.024)	0.011 (0.024)
Constant	8.012*** (1.544)	7.729*** (1.578)	1.203*** (0.175)	0.951*** (0.207)	0.590*** (0.067)	0.491*** (0.082)
Peer URM Faculty (centered)	0.081 (0.054)	0.141* (0.056)	0.018** (0.005)	0.020** (0.006)	0.007** (0.002)	0.007** (0.003)
Treatment $\times$ Peer URM Faculty (centered)	-0.083 (0.075)	-0.065 (0.074)	-0.004 (0.008)	-0.003 (0.008)	-0.001 (0.003)	-0.001 (0.003)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted $R^2$	0.011	0.015	0.033	0.034	0.040	0.045

Clustered standard errors at department level in parentheses.

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

## 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.
<b>Discipline Analysis</b>								
Computer Science	% URM	Treatment	Simple	2.2852	1.3775	1.659	0.0996	+
Computer Science	Any Hispanic	Treatment	Extended	0.1563	0.0832	1.880	0.0626	+
Mathematics	% URM	Treatment	Extended	1.4949	0.8357	1.789	0.0740	+
Mathematics	Count Black	Treatment	Extended	0.0998	0.0578	1.726	0.0848	+
Mechanical Engineering	% Black	Treatment	Simple	2.7713	1.0807	2.564	0.0127	*
Mechanical Engineering	Any Black	Treatment	Extended	0.2857	0.0972	2.940	0.0047	**
Mechanical Engineering	Count Black	Treatment	Simple	0.5272	0.1654	3.187	0.0022	**
Mechanical Engineering	Count URM	Treatment	Extended	0.8092	0.3492	2.318	0.0241	*
Physics	% Black	Treatment	Extended	1.3330	0.6331	2.105	0.0360	*
Physics	Any Black	Treatment	Extended	0.1337	0.0504	2.652	0.0084	**
Physics	Count Black	Treatment	Extended	0.1740	0.0679	2.562	0.0108	*
Physics	Count URM	Treatment	Extended	0.2361	0.1406	1.680	0.0939	+
<b>Identity Analysis</b>								
Demographic Subgroup	% Black	Treatment	Simple	0.5871	0.3084	1.904	0.0571	+
Demographic Subgroup	% Black Male	Treatment	Simple	0.4891	0.2628	1.861	0.0629	+
Demographic Subgroup	Any Black	Treatment	Extended	0.0445	0.0224	1.984	0.0475	*
Demographic Subgroup	Any Black Male	Treatment	Extended	0.0497	0.0221	2.248	0.0247	*
Demographic Subgroup	Count Black	Treatment	Simple	0.0669	0.0400	1.670	0.0951	+
Demographic Subgroup	Count Black Male	Treatment	Simple	0.0651	0.0339	1.922	0.0548	+
<b>Moderation Analysis</b>								
Department Rank	Count URM	Treatment $\times$ Dept Ranking	Extended	0.0039	0.0019	2.058	0.0397	*
<b>Semester Analysis</b>								
Fall Semester	Any Black	Treatment	Simple	0.0377	0.0169	2.232	0.0258	*
Fall Semester	Any URM	Treatment	Simple	0.0427	0.0255	1.676	0.0939	+
Fall Semester	Count Black	Treatment	Simple	0.0489	0.0213	2.299	0.0216	*
Fall Semester	Count URM	Treatment	Simple	0.0978	0.0467	2.093	0.0365	*

Note: Results sorted by analysis type and name. When both Model 1 (Simple) and Model 2 (Extended) are significant, only the result with the lower p-value is shown. 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.