Search Costs Field Experiment: Pre-Registration Analysis

Statistical Analysis Report

2025-06-02

Contents

1 Executive Summary

This report presents the comprehensive statistical analysis for the search costs field experiment, examining whether providing academic seminar organizers with access to a database of underrepresented racial minority (URM) faculty members increases diversity in seminar speakers. The analysis follows the pre-registered analysis plan and examines treatment effects across multiple dependent variables and subgroups.

Note: A comprehensive overview of all significant results ($p < 0.1$) is provided at the end of this document.

2 Summary Statistics

2.1 Overall Summary Statistics

Table 1: Overall Summary Statistics for Speaker Demographics

Demographic Group	Mean %	SD %	Mean Count	SD Count	Prop. Has Any
URM	7.81	11.37	1.07	1.34	0.557
Black	2.24	5.90	0.32	0.67	0.239
Hispanic	5.55	9.70	0.75	1.09	0.452
Female	16.87	16.25	2.39	2.52	0.755
Total Speakers	—	—	13.99	9.95	—

Note: N = 1656 departments.

Percentages calculated among speakers with demographic data available.

2.2 Summary Statistics by Discipline

Table 2: Summary Statistics by Discipline: URM Speakers

Discipline	N	Mean %	SD %	Mean Count	Prop. Has Any
Chemistry	271	9.13	10.47	1.32	0.653
Computer Science	142	4.86	9.01	0.61	0.380
Mathematics	811	7.37	11.02	1.00	0.513
Mechanical Engineering	82	8.38	9.14	1.12	0.634
Physics	350	8.87	13.70	1.23	0.640

Table 3: Summary Statistics by Discipline: Other Demographics

	Black		Hispanic		Female	
Discipline	Mean %	Prop. Any	Mean %	Prop. Any	Mean %	Prop. Any
Chemistry	4.20	0.402	4.83	0.476	23.75	0.863
Computer Science	1.46	0.169	3.41	0.275	18.88	0.789
Mathematics	1.72	0.192	5.64	0.435	13.90	0.695
Mechanical Engineering	3.28	0.329	5.10	0.463	19.25	0.768
Physics	1.98	0.229	6.89	0.540	17.06	0.791

2.3 Summary Statistics by Semester

Table 4: Summary Statistics by Semester

	URM			Black		Hispanic	
Semester (N)	Mean %	Mean Count	Prop. Any	Mean %	Prop. Any	Mean %	Prop. Any
Fall (1448)	7.44	0.57	0.385	1.74	0.119	5.68	0.310
Spring (1397)	7.99	0.68	0.431	2.66	0.183	5.30	0.319

	Female			Total Speakers	
Semester	Mean %	Mean Count	Prop. Any	Mean	SD
Fall	16.09	1.27	0.618	7.75	—
Spring	17.69	1.52	0.637	8.56	—

3 Main Effects Analysis

3.1 Main Question 1: URM Speaker Representation

Table 5: Main Question 1: Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.754	0.740	0.095	0.076	0.014	0.013
	(0.537)	(0.529)	(0.070)	(0.069)	(0.025)	(0.025)
Constant	7.325***	1.686	1.322***	0.436	0.640***	0.382***
	(0.909)	(1.810)	(0.142)	(0.268)	(0.050)	(0.100)
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	0.016	0.020	0.027	0.027	0.033

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

3.2 Main Question 2a: Total Number of Speakers

Table 6: Main Question 2a: Effect on Total Number of Speakers

	(1)	(2)
Treatment	−0.437	−0.404
	(0.569)	(0.579)
Constant	16.731***	15.607***
	(1.243)	(2.537)
Controls	Simple	Extended
N	1,656	1,656
Adjusted R^2	0.020	0.023

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

3.3 Main Question 2c: Non-URM Speakers

Table 7: Main Question 2c: Effect on Non-URM Speakers

	(1)	(2)
Treatment	−0.513	−0.465
	(0.536)	(0.544)
Constant	15.337***	15.048***
	(1.150)	(2.365)
Controls	Simple	Extended
N	1,656	1,656
Adjusted R^2	0.020	0.023

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

4 Demographic Subgroup Analysis

4.1 Black Speakers

Table 8: Effect on Black Speakers

	% Black		Count Black		Any Black	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.591^{+}	0.558^{+}	0.068^{+}	0.064^{+}	0.046^{+}	0.047^{*}
	(0.309)	(0.292)	(0.041)	(0.038)	(0.024)	(0.023)
Constant	3.398^{***}	0.376	0.586^{***}	0.154	0.389^{***}	0.170^{+}
	(0.613)	(1.214)	(0.083)	(0.157)	(0.048)	(0.091)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.026	0.035	0.041	0.055	0.034	0.041

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

4.2 Hispanic Speakers

Table 9: Effect on Hispanic Speakers

	% Hispanic		Count Hispanic		Any Hispanic	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.181	0.199	0.028	0.012	−0.007	−0.008
	(0.461)	(0.468)	(0.053)	(0.053)	(0.025)	(0.026)
Constant	3.733^{***}	1.217	0.715^{***}	0.268	0.481^{***}	0.326^{***}
	(0.736)	(1.526)	(0.107)	(0.202)	(0.049)	(0.098)
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	0.006	0.013	0.015	0.018	0.018

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

4.3 Female Speakers

Table 10: Effect on Female Speakers

	% Female		Count Female		Any Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.071	−0.217	−0.064	−0.116	−0.009	−0.010
	(0.833)	(0.829)	(0.135)	(0.129)	(0.022)	(0.021)
Constant	22.222^{***}	16.447^{***}	3.923^{***}	3.022^{***}	0.874^{***}	0.795^{***}
	(1.463)	(3.514)	(0.300)	(0.626)	(0.040)	(0.091)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.050	0.057	0.071	0.081	0.018	0.019

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

5 Discipline Subgroup Analysis

5.0.1 Chemistry (N=271)

Table 11: Chemistry : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.415	−0.509	−0.169	−0.251	0.026	0.004
	(1.187)	(1.208)	(0.169)	(0.172)	(0.055)	(0.059)
Constant	9.056***	2.188	1.863***	0.833	0.765***	0.473*
	(1.929)	(5.008)	(0.310)	(0.768)	(0.096)	(0.225)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	271	271	271	271	271	271
Adjusted R^2	-0.021	-0.008	0.095	0.096	0.049	0.056

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

5.0.2 Mathematics (N=811)

Table 12: Mathematics : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	1.135	1.456^{+}	0.147	0.147	0.021	0.011
	(0.711)	(0.856)	(0.097)	(0.116)	(0.032)	(0.032)
Constant	5.338***	2.211	0.873***	−0.083	0.489***	0.119
	(0.777)	(4.400)	(0.119)	(0.556)	(0.050)	(0.192)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	811	811	811	811	811	811
Adjusted R^2	0.008	0.006	0.003	0.002	-0.004	0.003

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

5.0.3 Physics (N=350)

Table 13: Physics : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.007	0.201	0.131	0.189	−0.028	−0.007
	(1.298)	(1.215)	(0.132)	(0.137)	(0.061)	(0.056)
Constant	7.242***	1.047	1.146***	1.966^{+}	0.600***	1.306**
	(2.101)	(10.013)	(0.211)	(1.111)	(0.080)	(0.410)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	350	350	350	350	350	350
Adjusted R^2	0.004	-0.008	-0.007	0.005	-0.001	0.027

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

5.0.4 Computer Science (N=142)

Table 14: Computer Science : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	2.448^{+}	2.646	0.147	0.062	0.109	0.114
	(1.339)	(1.797)	(0.139)	(0.198)	(0.092)	(0.088)
Constant	4.368^{**}	3.349	0.803^{**}	2.879^{*}	0.407^{**}	2.087^{***}
	(1.519)	(13.036)	(0.286)	(1.221)	(0.129)	(0.632)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	142	142	142	142	142	142
Adjusted R^2	0.081	0.105	0.120	0.101	0.111	0.134

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

5.0.5 Mechanical Engineering (N=82)

Table 15: Mechanical Engineering : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	2.767	2.362	0.598^{*}	0.739^{*}	0.037	0.039
	(1.975)	(1.909)	(0.300)	(0.358)	(0.110)	(0.123)
Constant	5.563^{*}	-2.640	0.850^{*}	1.841	0.470^{**}	0.132
	(2.313)	(10.400)	(0.419)	(1.872)	(0.160)	(0.493)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	82	82	82	82	82	82
Adjusted R^2	-0.007	-0.046	-0.040	0.032	0.030	0.048

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

6 Semester-Specific Analysis

6.1 Fall Semester

Table 16: Fall Semester: Effect on URM Speakers

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	1.133	1.031	0.100*	0.080+	0.044+	0.037
	(0.705)	(0.686)	(0.047)	(0.047)	(0.026)	(0.026)
Constant	5.125***	−4.747+	0.508***	−0.238	0.357***	0.011
	(1.187)	(2.488)	(0.092)	(0.165)	(0.052)	(0.095)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,448	1,448	1,448	1,448	1,448	1,448
Adjusted R^2	0.013	0.024	0.018	0.033	0.019	0.028

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

6.2 Spring Semester

Table 17: Spring Semester: Effect on URM Speakers

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.426	0.549	−0.009	−0.007	−0.020	−0.017
	(0.767)	(0.770)	(0.057)	(0.057)	(0.027)	(0.027)
Constant	9.357***	7.954**	1.061***	0.868***	0.595***	0.491***
	(1.392)	(2.778)	(0.116)	(0.233)	(0.052)	(0.102)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,397	1,397	1,397	1,397	1,397	1,397
Adjusted R^2	0.002	0.001	0.019	0.017	0.022	0.023

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

7 Intersectional Analysis

7.1 URM *times* Female

Table 18: Effect on URM Female Speakers

	% URM Female		Count URM Female		Any URM Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	−0.047	−0.088	0.015	0.006	0.011	0.004
	(0.173)	(0.186)	(0.020)	(0.019)	(0.018)	(0.017)
Constant	2.060***	0.032	0.256***	−0.020	0.236***	−0.017
	(0.331)	(0.568)	(0.044)	(0.084)	(0.039)	(0.072)
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	0.019	0.036	0.057	0.037	0.057

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

7.2 Black Female

Table 19: Effect on Black Female Speakers

	% Black Female		Count Black Female		Any Black Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.099	0.104	0.001	0.001	0.003	0.003
	(0.073)	(0.073)	(0.010)	(0.010)	(0.009)	(0.009)
Constant	0.755***	0.141	0.087***	0.010	0.076***	0.010
	(0.155)	(0.281)	(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	0.027	0.034	0.025	0.030	0.021	0.026

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

7.3 Black Male

Table 20: Effect on Black Male Speakers

	% Black Male		Count Black Male		Any Black Male	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.492^{+}	0.454^{+}	0.066^{+}	0.063^{+}	0.052*	0.052*
	(0.263)	(0.247)	(0.034)	(0.033)	(0.023)	(0.023)
Constant	2.643***	0.235	0.484***	0.141	0.367***	0.139
	(0.523)	(1.082)	(0.070)	(0.133)	(0.048)	(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	0.018	0.025	0.033	0.044	0.031	0.038

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

7.4 Hispanic Female

Table 21: Effect on Hispanic Female Speakers

	% Hispanic Female		Count Hispanic Female		Any Hispanic Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	−0.148	−0.194	0.001	−0.007	−0.001	−0.008
	(0.160)	(0.177)	(0.013)	(0.013)	(0.012)	(0.012)
Constant	1.289***	−0.119	0.066*	−0.046	0.067**	−0.031
	(0.303)	(0.484)	(0.026)	(0.053)	(0.025)	(0.051)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.000	0.003	0.003	0.014	0.003	0.013

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

7.5 Hispanic Male

Table 22: Effect on Hispanic Male Speakers

	% Hispanic Male		Count Hispanic Male		Any Hispanic Male	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.329	0.394	0.026	0.018	−0.006	−0.007
	(0.389)	(0.388)	(0.047)	(0.047)	(0.025)	(0.025)
Constant	2.444***	1.336	0.645***	0.311^{+}	0.467***	0.313**
	(0.584)	(1.253)	(0.094)	(0.176)	(0.049)	(0.097)
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	0.009	0.014	0.016	0.018	0.019

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

8 Heterogeneity Analysis

8.1 Moderation by Discipline

8.1.1 Testing Whether Treatment Effects Vary by Discipline

Table 23: Joint Test of Discipline Interactions

Outcome	Model	F-statistic	p-value
% URM	Simple	—	—
% URM	Extended	—	—
Count URM	Simple	—	—
Count URM	Extended	—	—
Any URM	Simple	—	—
Any URM	Extended	—	—

Note: F-statistics test the null hypothesis that all discipline-treatment interactions are zero. Chemistry is the reference category.

Table 24: Treatment Effects by Discipline (Chemistry as Reference)

	Simple Model		Extended Model	
Discipline	Coefficient	SE	Coefficient	SE
Panel A: % URM				
Chemistry (ref.)	0.5790	(1.2576)	0.3861	(1.1861)
Mathematics	0.8870	(0.7378)	0.7892	(0.7663)
Physics	-0.0683	(1.3989)	0.0269	(1.3751)
Computer Science	0.6374	(1.6015)	1.3046	(1.7206)
Mech. Engineering	3.7569	(1.7783)	3.4691	(1.8804)
Panel B: Count URM				
Chemistry (ref.)	-0.1894	(0.1932)	-0.2023	(0.1754)
Mathematics	0.1377	(0.1023)	0.1035	(0.1044)
Physics	0.1494	(0.1346)	0.1373	(0.1352)
Computer Science	-0.0107	(0.1870)	0.0166	(0.1908)
Mech. Engineering	0.6010	(0.2698)	0.6217	(0.2811)

Note: Coefficients show the treatment effect within each discipline. Standard errors (in parentheses) are clustered at the department level and calculated using the delta method.

8.2 Moderation by Department URM Representation

Department URM representation moderation analysis (n = 1656)

Table 25: Moderation by Department URM Faculty Fraction

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.716	0.752	0.090	0.078	0.015	0.014
	(0.530)	(0.530)	(0.070)	(0.069)	(0.025)	(0.025)
Dept URM Fraction (centered)	−3.702	−2.828	−0.711	−0.882	−0.254	−0.348
	(9.692)	(9.639)	(1.179)	(1.119)	(0.533)	(0.502)
Treatment × Dept URM Fraction (centered)	27.266	23.561	3.923^{+}	3.781	0.231	0.212
	(14.593)		(2.178)		(0.653)	
Constant	7.188***	2.011	1.303***	0.473^{+}	0.640***	0.373***
	(0.914)	(1.822)	(0.143)	(0.266)	(0.050)	(0.100)
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	0.017	0.023	0.029	0.026	0.033

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

8.3 Moderation by Department Female Representation

Department female representation moderation analysis (n = 1656)

Table 26: Moderation by Department Female Faculty Fraction

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.656	0.744	0.079	0.078	0.010	0.014
	(0.533)	(0.529)	(0.069)	(0.069)	(0.025)	(0.025)
Dept Female Fraction (centered)	5.780	6.804	1.170*	1.192*	0.471^{+}	0.597*
	(4.450)	(4.375)	(0.570)	(0.603)	(0.255)	(0.240)
Treatment × Dept Female Fraction (centered)	−1.779	−3.121	−0.786	−0.827	−0.547^{+}	−0.524
	(6.427)		(0.879)		(0.320)	
Constant	7.317***	2.732	1.326***	0.600*	0.645***	0.456***
	(0.910)	(1.691)	(0.140)	(0.255)	(0.049)	(0.093)
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	0.016	0.022	0.027	0.029	0.035

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

8.4 Moderation by Department Ranking

Department ranking moderation analysis (n = 1656)

Table 27: Moderation by Department Ranking

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.702	0.737	0.092	0.073	0.014	0.013
	(0.527)	(0.527)	(0.069)	(0.069)	(0.025)	(0.025)
Dept Ranking (centered)	0.016	0.028*	−0.001	0.001	−0.001	0.0003
	(0.012)	(0.012)	(0.001)	(0.001)	(0.001)	(0.001)
Treatment × Dept Ranking (centered)	0.007	0.004	0.004^{+}	0.004	0.001	0.001
	(0.017)		(0.002)		(0.001)	
Constant	7.263***	3.172*	1.315***	0.590**	0.640***	0.412***
	(0.898)	(1.560)	(0.141)	(0.229)	(0.050)	(0.087)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,656	1,656	1,656	1,656	1,656	1,656
Adjusted R^2	0.013	0.016	0.023	0.030	0.027	0.034

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

8.5 Moderation by Total Faculty Size

Department faculty size moderation analysis (n = 1656)

Table 28: Moderation by Department Faculty Size

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.938^{+}	0.740	0.089	0.072	0.014	0.013
	(0.554)	(0.530)	(0.074)	(0.069)	(0.026)	(0.025)
Total Faculty (centered)	−0.027	−0.026	0.002	0.001	0.00003	−0.001
	(0.022)	(0.022)	(0.002)	(0.003)	(0.001)	(0.001)
Treatment × Total Faculty (centered)	0.007	0.0004	−0.003	−0.004	−0.0001	−0.0005
	(0.026)		(0.003)		(0.001)	
Constant	7.008^{***}	0.721	1.331^{***}	0.383	0.640^{***}	0.337^{**}
	(0.950)	(1.939)	(0.147)	(0.295)	(0.051)	(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	0.016	0.020	0.027	0.026	0.033

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

8.6 Moderation by URM Faculty in Peer Departments

Peer departments URM faculty moderation analysis (n = 1656)

Table 29: Moderation by URM Faculty in Peer Departments

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.750	0.725	0.098	0.076	0.015	0.013
	(0.532)	(0.527)	(0.069)	(0.069)	(0.025)	(0.025)
Peer URM Faculty (centered)	0.047	0.140*	0.009^{+}	0.018**	0.004^{+}	0.006*
	(0.053)	(0.056)	(0.005)	(0.006)	(0.002)	(0.003)
Treatment × Peer URM Faculty (centered)	−0.076	−0.062	−0.002	−0.001	−0.001	−0.0002
	(0.074)		(0.008)		(0.003)	
Constant	7.323***	5.253***	1.357***	1.028***	0.657***	0.577***
	(0.937)	(1.180)	(0.144)	(0.191)	(0.050)	(0.064)
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	0.016	0.022	0.027	0.030	0.033

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

9 Summary of All Significant Results

Table 30: All Significant Results (p < 0.1) from All Analyses

Analysis	Outcome	Variable	Model	Coef.	SE	t-stat	p-value	Sig.
Discipline Moderation	Count URM	Treatment × Mech. Engineering	Extended	0.8241	0.3286	2.508	0.0122	*
Discipline Moderation	Count URM	Treatment × Mech. Engineering	Simple	0.7904	0.3330	2.374	0.0177	*
Intersectional	Any Black Male	Treatment	Extended	0.0518	0.0226	2.292	0.0220	*
Intersectional	Any Black Male	Treatment	Simple	0.0515	0.0233	2.216	0.0268	*
Fall Semester	Count URM	Treatment	Simple	0.1004	0.0474	2.117	0.0344	*
Ranking Moderation	Count URM	Treatment × Dept Ranking	Extended	0.0039	0.0019	2.078	0.0378	*
Demographic Subgroup	Any Black	Treatment	Extended	0.0466	0.0229	2.036	0.0419	*
Discipline: Mechanical Engineering	Count URM	Treatment	Extended	0.7390	0.3584	2.062	0.0436	*
Discipline: Mechanical Engineering	Count URM	Treatment	Simple	0.5978	0.3002	1.991	0.0506	+
Ranking Moderation	Count URM	Treatment × Dept Ranking	Simple	0.0040	0.0020	1.946	0.0518	+
Demographic Subgroup	Any Black	Treatment	Simple	0.0457	0.0236	1.940	0.0525	+
Intersectional	Count Black Male	Treatment	Extended	0.0632	0.0328	1.928	0.0540	+
Intersectional	Count Black Male	Treatment	Simple	0.0659	0.0344	1.916	0.0556	+
Demographic Subgroup	% Black	Treatment	Extended	0.5578	0.2920	1.910	0.0563	+
Demographic Subgroup	% Black	Treatment	Simple	0.5909	0.3093	1.910	0.0563	+
Intersectional	% Black Male	Treatment	Simple	0.4920	0.2630	1.871	0.0615	+
URM Faculty Moderation	% URM	Treatment × Dept URM Fraction	Simple	27.2655	14.5929	1.868	0.0619	+
Intersectional	% Black Male	Treatment	Extended	0.4542	0.2471	1.838	0.0663	+
Discipline: Computer Science	% URM	Treatment	Simple	2.4478	1.3392	1.828	0.0699	+
URM Faculty Moderation	Count URM	Treatment × Dept URM Fraction	Extended	3.7814	2.0952	1.805	0.0713	+
URM Faculty Moderation	Count URM	Treatment × Dept URM Fraction	Simple	3.9231	2.1781	1.801	0.0719	+
Female Faculty Moderation	Any URM	Treatment × Dept Female Fraction	Extended	-0.5242	0.3036	-1.727	0.0844	+
Female Faculty Moderation	Any URM	Treatment × Dept Female Fraction	Simple	-0.5466	0.3201	-1.707	0.0879	+
Fall Semester	Any URM	Treatment	Simple	0.0442	0.0259	1.704	0.0886	+
Fall Semester	Count URM	Treatment	Extended	0.0800	0.0470	1.703	0.0888	+
Discipline: Mathematics	% URM	Treatment	Extended	1.4557	0.8564	1.700	0.0896	+
Faculty Size Moderation	% URM	Treatment	Simple	0.9376	0.5539	1.693	0.0907	+
Demographic Subgroup	Count Black	Treatment	Simple	0.0679	0.0406	1.673	0.0945	+
Demographic Subgroup	Count Black	Treatment	Extended	0.0642	0.0384	1.672	0.0948	+
URM Faculty Moderation	% URM	Treatment × Dept URM Fraction	Extended	23.5607	14.1639	1.663	0.0964	+

Note: Results sorted by p-value. Significance levels: + p<0.1; * p<0.05; ** p<0.01; *** p<0.001. SE = Clustered standard errors at department level. This table includes all treatment effects and interaction terms from main effects, demographic subgroup, semester-specific, intersectional, and moderation analyses.

Table 31: Summary of Significant Results by Analysis Type

Analysis Type	Total Significant	Significant at 5%
Demographic Subgroup	6	1
Discipline Moderation	2	2
Discipline: Computer Science	1	0
Discipline: Mathematics	1	0
Discipline: Mechanical Engineering	2	1
Faculty Size Moderation	1	0
Fall Semester	3	1
Female Faculty Moderation	2	0
Intersectional	6	2
Ranking Moderation	2	1
URM Faculty Moderation	4	0
Total	30	8