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	7.76	11.57	1.03	1.32	0.545
Black	2.15	5.51	0.30	0.66	0.228
Hispanic	5.59	10.07	0.72	1.07	0.442
Female	16.97	16.73	2.29	2.48	0.745
Total Speakers	—	—	13.46	9.93	—

Note: N = 1617 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	259	8.83	9.68	1.24	0.637
Computer Science	141	4.73	9.22	0.56	0.355
Mathematics	793	7.42	11.58	0.96	0.504
Mechanical Engineering	82	7.88	9.11	1.07	0.598
Physics	342	8.97	13.83	1.20	0.635

Table 3: Summary Statistics by Discipline: Other Demographics

	Black		Hispanic		Female	
Discipline	Mean %	Prop. Any	Mean %	Prop. Any	Mean %	Prop. Any
Chemistry	4.04	0.390	4.69	0.459	23.80	0.849
Computer Science	1.33	0.149	3.40	0.262	19.61	0.780
Mathematics	1.67	0.185	5.74	0.427	13.99	0.689
Mechanical Engineering	3.08	0.305	4.79	0.439	18.48	0.732
Physics	1.93	0.216	7.05	0.535	17.24	0.784

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)	7.43	0.57	0.384	1.74	0.119	5.68	0.310
Spring (1257)	8.09	0.67	0.426	2.73	0.180	5.34	0.312

	Female			Total Speakers	
Semester	Mean %	Mean Count	Prop. Any	Mean	SD
Fall	16.08	1.27	0.618	7.75	—
Spring	17.97	1.49	0.628	8.39	—

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	0.758	0.716	0.089	0.067	0.008	0.006
	(0.553)	(0.548)	(0.070)	(0.069)	(0.026)	(0.025)
Constant	6.858***	−0.254	1.254***	0.327	0.636***	0.347***
	(0.940)	(1.774)	(0.142)	(0.269)	(0.051)	(0.099)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.011	0.021	0.019	0.027	0.028	0.035

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	−0.405	−0.373
	(0.577)	(0.590)
Constant	16.349***	15.969***
	(1.263)	(2.579)
Controls	Simple	Extended
N	1,617	1,617
Adjusted R^2	0.018	0.019

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

3.3 Main Question 2c: Non-URM Speakers

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

	(1)	(2)
Treatment	−0.479	−0.431
	(0.544)	(0.555)
Constant	15.042***	15.549***
	(1.169)	(2.408)
Controls	Simple	Extended
N	1,617	1,617
Adjusted R^2	0.018	0.019

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

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	0.451	0.429	0.062	0.059	0.033	0.034
	(0.309)	(0.292)	(0.040)	(0.037)	(0.023)	(0.023)
Constant	3.382***	−0.560	0.566***	0.108	0.390***	0.160^{+}
	(0.618)	(1.057)	(0.080)	(0.153)	(0.048)	(0.090)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.030	0.045	0.038	0.055	0.036	0.043

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	0.325	0.304	0.027	0.008	−0.013	−0.017
	(0.475)	(0.486)	(0.052)	(0.052)	(0.026)	(0.026)
Constant	3.276***	0.206	0.667***	0.203	0.472***	0.307**
	(0.741)	(1.524)	(0.107)	(0.203)	(0.050)	(0.099)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.008	0.008	0.012	0.015	0.017	0.017

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	−0.076	−0.491	−0.079	−0.131	−0.009	−0.013
	(0.863)	(0.853)	(0.135)	(0.130)	(0.022)	(0.022)
Constant	22.047***	15.679***	3.803***	3.082***	0.856***	0.731***
	(1.568)	(3.748)	(0.305)	(0.636)	(0.043)	(0.098)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.046	0.055	0.061	0.068	0.015	0.015

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=259)

Table 11: Chemistry : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	−0.149	−1.255	−0.094	−0.198	0.0003	−0.045
	(1.302)	(1.274)	(0.167)	(0.162)	(0.062)	(0.061)
Constant	10.937***	−0.272	1.829***	0.829	0.799***	0.513*
	(2.050)	(5.147)	(0.326)	(0.779)	(0.106)	(0.218)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	259	259	259	259	259	259
Adjusted R^2	0.011	0.071	0.090	0.104	0.055	0.094

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=793)

Table 12: Mathematics : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	1.418^{+}	1.742*	0.113	0.110	0.008	−0.003
	(0.735)	(0.886)	(0.099)	(0.117)	(0.032)	(0.033)
Constant	4.689***	1.077	0.831***	−0.228	0.474***	0.148
	(0.788)	(4.636)	(0.120)	(0.567)	(0.050)	(0.178)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	793	793	793	793	793	793
Adjusted R^2	0.010	0.006	0.001	-0.000	-0.003	0.005

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=342)

Table 13: Physics : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	−0.472	−0.273	0.095	0.159	−0.037	−0.017
	(1.317)	(1.234)	(0.138)	(0.145)	(0.061)	(0.060)
Constant	7.323***	2.231	1.134***	1.956^{+}	0.630***	1.284**
	(2.065)	(10.120)	(0.212)	(1.150)	(0.079)	(0.415)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	342	342	342	342	342	342
Adjusted R^2	0.007	-0.006	-0.011	0.003	-0.001	0.024

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=141)

Table 14: Computer Science : Effect on URM Speaker Representation

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	2.359^{+}	2.440	0.136	0.022	0.127	0.115
	(1.354)	(1.800)	(0.122)	(0.186)	(0.079)	(0.085)
Constant	3.836^{*}	1.497	0.686^{*}	2.905^{*}	0.349^{**}	2.027^{**}
	(1.502)	(13.293)	(0.286)	(1.186)	(0.125)	(0.628)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	141	141	141	141	141	141
Adjusted R^2	0.066	0.092	0.103	0.088	0.088	0.103

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	4.146^{*}	3.855^{*}	0.653^{*}	0.795^{*}	0.119	0.120
	(1.922)	(1.791)	(0.299)	(0.360)	(0.114)	(0.125)
Constant	5.092^{*}	0.367	0.852^{*}	1.930	0.450^{**}	0.261
	(2.259)	(10.108)	(0.418)	(1.877)	(0.163)	(0.500)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	82	82	82	82	82	82
Adjusted R^2	0.020	-0.016	-0.033	0.027	0.007	0.010

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	1.109	1.003	0.100*	0.079+	0.042	0.035
	(0.705)	(0.686)	(0.047)	(0.047)	(0.026)	(0.026)
Constant	5.158***	−4.877*	0.510***	−0.255	0.359***	−0.0003
	(1.188)	(2.488)	(0.092)	(0.164)	(0.052)	(0.094)
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	0.354	0.429	−0.009	−0.011	−0.026	−0.024
	(0.834)	(0.845)	(0.060)	(0.061)	(0.029)	(0.028)
Constant	8.591***	3.939	1.028***	0.747**	0.591***	0.445***
	(1.555)	(2.757)	(0.123)	(0.246)	(0.055)	(0.110)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,257	1,257	1,257	1,257	1,257	1,257
Adjusted R^2	0.002	0.003	0.018	0.016	0.025	0.028

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	−0.048	−0.108	0.010	0.001	0.007	0.0002
	(0.180)	(0.193)	(0.020)	(0.019)	(0.017)	(0.017)
Constant	2.044***	−0.241	0.240***	−0.025	0.220***	−0.020
	(0.350)	(0.584)	(0.044)	(0.082)	(0.039)	(0.069)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.013	0.022	0.034	0.053	0.035	0.054

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	0.088	0.091	0.002	0.002	0.004	0.004
	(0.077)	(0.077)	(0.010)	(0.009)	(0.009)	(0.009)
Constant	0.829***	0.077	0.082***	0.003	0.070***	0.003
	(0.169)	(0.299)	(0.022)	(0.041)	(0.019)	(0.035)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.032	0.042	0.022	0.029	0.018	0.025

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	0.362	0.338	0.057^{+}	0.055^{+}	0.036	0.037^{+}
	(0.255)	(0.240)	(0.034)	(0.032)	(0.023)	(0.022)
Constant	2.553***	−0.637	0.467***	0.115	0.365***	0.140
	(0.510)	(0.857)	(0.068)	(0.129)	(0.047)	(0.089)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.022	0.035	0.030	0.042	0.031	0.037

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	−0.139	−0.203	−0.002	−0.009	−0.002	−0.009
	(0.163)	(0.182)	(0.013)	(0.013)	(0.012)	(0.012)
Constant	1.198***	−0.329	0.053*	−0.046	0.055*	−0.028
	(0.308)	(0.489)	(0.025)	(0.052)	(0.023)	(0.050)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.001	0.004	0.003	0.012	0.002	0.010

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	0.464	0.507	0.024	0.012	−0.015	−0.019
	(0.405)	(0.405)	(0.047)	(0.046)	(0.026)	(0.026)
Constant	2.077***	0.535	0.605***	0.241	0.454***	0.290**
	(0.590)	(1.258)	(0.095)	(0.177)	(0.050)	(0.096)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.012	0.010	0.014	0.017	0.017	0.018

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.)	0.0331	(1.3101)	-0.0599	(1.1991)
Mathematics	1.1422	(0.7675)	0.9434	(0.8051)
Physics	-0.4625	(1.4368)	-0.3631	(1.4063)
Computer Science	0.5792	(1.5699)	1.3142	(1.7044)
Mech. Engineering	4.8298	(1.7810)	4.5435	(1.8978)
Panel B: Count URM				
Chemistry (ref.)	-0.1135	(0.1899)	-0.1183	(0.1700)
Mathematics	0.1045	(0.1026)	0.0598	(0.1033)
Physics	0.1257	(0.1382)	0.1125	(0.1395)
Computer Science	-0.0237	(0.1788)	0.0011	(0.1821)
Mech. Engineering	0.6380	(0.2660)	0.6585	(0.2780)

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 = 1617)

Table 25: Moderation by Department URM Faculty Fraction

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.728	0.730	0.084	0.070	0.009	0.006
	(0.546)	(0.548)	(0.069)	(0.069)	(0.026)	(0.025)
Dept URM Fraction (centered)	−7.081	−5.965	−1.051	−1.190	−0.484	−0.565
	(10.365)	(10.329)	(1.181)	(1.111)	(0.516)	(0.482)
Treatment × Dept URM Fraction (centered)	32.372	27.887	4.660*	4.488	0.583	0.510
	(15.270)		(2.190)		(0.639)	
Constant	6.707***	0.059	1.233***	0.369	0.635***	0.337***
	(0.944)	(1.781)	(0.143)	(0.266)	(0.050)	(0.100)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.014	0.022	0.024	0.030	0.027	0.034

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

8.3 Moderation by Department Female Representation

Department female representation moderation analysis (n = 1617)

Table 26: Moderation by Department Female Faculty Fraction

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.644	0.718	0.073	0.069	0.003	0.007
	(0.549)	(0.547)	(0.069)	(0.068)	(0.026)	(0.025)
Dept Female Fraction (centered)	5.987	6.771	1.312*	1.307*	0.527*	0.634**
	(4.674)	(4.600)	(0.583)	(0.614)	(0.248)	(0.230)
Treatment × Dept Female Fraction (centered)	−0.367	−1.452	−1.030	−1.089	−0.555^{+}	−0.514
	(6.901)		(0.890)		(0.318)	
Constant	6.816***	0.901	1.260***	0.494^{+}	0.640***	0.429***
	(0.939)	(1.664)	(0.139)	(0.256)	(0.049)	(0.094)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.012	0.020	0.021	0.028	0.030	0.036

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 = 1617)

Table 27: Moderation by Department Ranking

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.687	0.713	0.085	0.065	0.007	0.005
	(0.542)	(0.545)	(0.069)	(0.068)	(0.026)	(0.025)
Dept Ranking (centered)	0.021^{+}	0.037^{**}	-0.001	0.002	-0.0002	0.001
	(0.013)	(0.013)	(0.001)	(0.001)	(0.0005)	(0.001)
Treatment × Dept Ranking (centered)	0.005	0.003	0.003	0.003	0.001	0.001
	(0.017)		(0.002)		(0.001)	
Constant	6.775^{***}	1.669	1.249^{***}	0.496^{*}	0.635^{***}	0.390^{***}
	(0.916)	(1.537)	(0.141)	(0.231)	(0.051)	(0.086)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.016	0.020	0.021	0.028	0.027	0.035

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 = 1617)

Table 28: Moderation by Department Faculty Size

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.947^{+}	0.712	0.082	0.064	0.008	0.006
	(0.574)	(0.548)	(0.074)	(0.069)	(0.026)	(0.025)
Total Faculty (centered)	−0.028	−0.024	0.001	0.001	−0.0002	−0.001
	(0.023)	(0.023)	(0.003)	(0.003)	(0.001)	(0.001)
Treatment × Total Faculty (centered)	0.007	−0.003	−0.001	−0.002	0.0003	−0.0001
	(0.027)		(0.003)		(0.001)	
Constant	6.530^{***}	−1.224	1.266^{***}	0.289	0.635^{***}	0.308^{**}
	(0.980)	(1.915)	(0.146)	(0.296)	(0.052)	(0.105)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.012	0.020	0.018	0.027	0.027	0.034

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

8.6 Moderation by URM Faculty in Peer Departments

Peer departments URM faculty moderation analysis (n = 1617)

Table 29: Moderation by URM Faculty in Peer Departments

	% URM		Count URM		Any URM	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.760	0.709	0.092	0.068	0.009	0.006
	(0.549)	(0.547)	(0.069)	(0.069)	(0.026)	(0.025)
Peer URM Faculty (centered)	0.032	0.148**	0.008	0.017**	0.003	0.005*
	(0.055)	(0.057)	(0.005)	(0.007)	(0.002)	(0.003)
Treatment × Peer URM Faculty (centered)	−0.039	−0.025	0.001	0.002	0.001	0.001
	(0.077)		(0.008)		(0.003)	
Constant	6.894***	4.252***	1.291***	0.931***	0.651***	0.551***
	(0.977)	(1.216)	(0.144)	(0.194)	(0.051)	(0.065)
Controls	Simple	Extended	Simple	Extended	Simple	Extended
N	1,617	1,617	1,617	1,617	1,617	1,617
Adjusted R^2	0.011	0.020	0.021	0.027	0.030	0.034

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	0.7768	0.3230	2.405	0.0163	*
Discipline Moderation	Count URM	Treatment × Mech. Engineering	Simple	0.7515	0.3273	2.296	0.0218	*
Discipline Moderation	% URM	Treatment × Mech. Engineering	Simple	4.7967	2.2158	2.165	0.0306	*
Discipline: Mechanical Engineering	Count URM	Treatment	Extended	0.7950	0.3602	2.207	0.0312	*
Discipline: Mechanical Engineering	Count URM	Treatment	Simple	0.6525	0.2987	2.185	0.0324	*
URM Faculty Moderation	Count URM	Treatment × Dept URM Fraction	Extended	4.4881	2.1060	2.131	0.0332	*
URM Faculty Moderation	Count URM	Treatment × Dept URM Fraction	Simple	4.6601	2.1903	2.128	0.0335	*
URM Faculty Moderation	% URM	Treatment × Dept URM Fraction	Simple	32.3717	15.2704	2.120	0.0342	*
Discipline: Mechanical Engineering	% URM	Treatment	Simple	4.1456	1.9222	2.157	0.0346	*
Fall Semester	Count URM	Treatment	Simple	0.1000	0.0474	2.107	0.0353	*
Discipline: Mechanical Engineering	% URM	Treatment	Extended	3.8546	1.7913	2.152	0.0355	*
Discipline Moderation	% URM	Treatment × Mech. Engineering	Extended	4.6035	2.2363	2.059	0.0397	*
Discipline: Mathematics	% URM	Treatment	Extended	1.7420	0.8863	1.966	0.0497	*
Discipline: Mathematics	% URM	Treatment	Simple	1.4184	0.7352	1.929	0.0541	+
URM Faculty Moderation	% URM	Treatment × Dept URM Fraction	Extended	27.8871	14.7376	1.892	0.0586	+
Female Faculty Moderation	Any URM	Treatment × Dept Female Fraction	Simple	-0.5553	0.3185	-1.744	0.0814	+
Discipline: Computer Science	% URM	Treatment	Simple	2.3594	1.3542	1.742	0.0839	+
Female Faculty Moderation	Any URM	Treatment × Dept Female Fraction	Extended	-0.5144	0.3001	-1.714	0.0866	+
Intersectional	Count Black Male	Treatment	Extended	0.0547	0.0321	1.706	0.0883	+
Fall Semester	Count URM	Treatment	Extended	0.0788	0.0469	1.681	0.0930	+
Intersectional	Count Black Male	Treatment	Simple	0.0565	0.0338	1.670	0.0951	+
Faculty Size Moderation	% URM	Treatment	Simple	0.9471	0.5738	1.651	0.0990	+
Intersectional	Any Black Male	Treatment	Extended	0.0370	0.0225	1.648	0.0996	+

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%
Discipline Moderation	4	4
Discipline: Computer Science	1	0
Discipline: Mathematics	2	1
Discipline: Mechanical Engineering	4	4
Faculty Size Moderation	1	0
Fall Semester	2	1
Female Faculty Moderation	2	0
Intersectional	3	0
URM Faculty Moderation	4	3
Total	23	13