Coming Soon to a Neighborhood Near You?

Off-Campus Recruiting by Public Research Universities



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Motivation

Policy discourse about access to public research universities

The problem: access to public research universities

- Historical mission of social mobility for meritorious state residents
- Concern about growing socioeconomic and racial inequality in access

Mainstream policy discourse about access inequality

- "Achievement gap", "under-matching"; place responsibility on students, K-12 schools
- Universities pledge commitment to access via policies (e.g., holistic admission)
- Problem with policy discourse: decades of research finds policy adoption a symbolic effort to appease stakeholders (e.g., Davis, 2005)

Geography of Opportunity (Galster and Killen, 1995)

- o Educational opportunities are a function of where students live
- Number of local colleges and universities spatially varies along the racial and socioeconomic characteristics of neighborhoods (Hillman, 2016)
- Shifts onus away from students and K-12 schools; but students' college choices are also shaped by choices of colleges and universities (Rhoades, 2014)

Motivation

Analyze recruiting to understand university enrollment priorities

Alternative explanation for access inequality

o University enrollment priorities biased against poor students and/or communities of color

Why study university recruiting behavior

- Universities expend substantial resources identifying and recruiting prospects (Noel-Levitz, 2018)
- o Internal resource allocation better indicator of organizational priorities than rhetoric, policies
- Knowing which student populations targeted by recruiting efforts indicates enrollment priorities

Research focus

Analyze off-campus recruiting visits (e.g., visit to a local high school) by public research universities as
 a means of gaining insight about university enrollment priorities

Research question

- What are the similarities and differences in off-campus recruiting patterns across universities?

Analytic focus

- Income; race; academic achievement; in-state vs. out-of-state

Background

The enrollment management industry

The enrollment funnel



Interventions along the funnel

- Identify prospects
 - Buy "student lists" from College
 Board/ACT
- Recruit prospects remotely
 - Email, mail, text, etc.
- Recruit prospects in-person
 - Off-campus recruiting visits (e.g., high school visits, college fairs)
 - Campus visits
 - Other "outreach"
- Solicit inquiries, stealth applicants
 - Social media, advertising
- Convert admits to enrollees
 - Financial aid leveraging

Literature review

Scholarship on recruiting

Evaluations of recruiting/outreach interventions (e.g., Dynarski, Libassi, Michelmore, Owen, 2018)

But unclear whether universities substantively adopt "best practices" in less controlled settings

Audits of response to "inquiries" by admissions officers (e.g., Hanson, 2017; Thornhill, forthcoming)

Identifies biases of individual admissions officers

Off-campus recruiting visits

- Scholarship analyzing college perspective (Stevens, 2007)
 - Important for relationships with prospects, counselors at "feeder" schools
- Market research (Noel-Levitz, 2018)
 - Second highest source of "inquiries"; third highest source of enrollees
- Scholarship analyzing perspective of high school students (Holland, 2019)
 - Which universities visit affects student decisions; especially first-gen, students of color

Research gap: we don't know which universities visit which schools, communities

o If schools in low-income communities or communities of color are not receiving visits, "undermatching" may be due to under-recruiting rather than lack of guidance

Theoretical framework

Enrollment priorities and recruiting behavior

Theoretical motivation for studying recruiting

- "New" institutional theory (Meyer and Rowan, 1977)
 - Organizations have finite resources and cannot pursue multiple goals (Thompson, 1967) -When facing pressure to pursue many goals, organizations:
 - Substantively adopt some goals (directing resources)
 - · Symbolically adopt others (policies, rhetoric)
- "Iron triangle" of enrollment management (EM)
 - Three broad enrollment goals: access, academic profile, revenue
 - Scarce resources; depending on priorities, some goals receive more resources than others
 - Off-campus recruiting is allocation of resources
 - Knowing which populations targeted by recruiting interventions indicate enrollment priorities

Theoretical framework

Expectations about similarities and differences in recruiting behavior

Resource dependence theory (RDT) (Pfeffer and Salancik, 1978)

- Sensitive to demands from providers of important resources that cannot be obtained elsewhere
- Org strategies when a resouce becomes uncertain/declines or demands become onerous
 - e.g., compliance, avoidance, cooptation, resource diversification
- Universities with weak state funding
 - More visits to affluent out-of-state, affluent in-state
- Universities with small/declining "college age" population
 - More out-of-state visits

Academic Capitalism (AC) (Slaughter and Rhoades, 2004)

- RDT assumes restoring state funding would compel universities to de-emphasize nonresident enrollment/recruiting
- AC suggests pursuit of revenue displaces public-good mission for market logic
- Recruiting by universities with similar external conditions can differ depending how whether or to what extent "market logic" ideology is adopted

Research methods

The broader off-campus recruiting research project

Data collection

- Method
 - Web-scrape admissions websites
 - Public records requests
- Criteria to be included in data collection
 - 1. Post visits on admissions websites
 - 2. Organizational type
- Data collection sample (larger project)
 - 54 public research universities
 - 49 private research universities
 - 42 selective private liberal arts
- Data collection period
 - 1/1/2017 to 12/31/2017
 - Ongoing data collection with larger sample

Sample data



Admissions Events

Come meet us when we are in your area.

United States—California

- Trabuco Hills High School Thursday, November 3 at 12:22 PM Mission Viejo, CA
- Tustin Unified College and Career Fair Monday, November 7 at 6:00 PM Tustin, CA

United States—Georgia

 Augusta Preparatory Day School Thursday, November 3 at 12:45 PM Martinez, GA

United States-Kentucky

- Cooper High School College Fair Thursday, November 17 at 8:00 AM Union. KY
- Randall Cooper High School College Fair Thursday, November 17 at 8:00 AM Union, KY
- Woodford County High School College Fair Thursday, November 17 at 6:30 PM Versailles, KY
- Covington Latin High School College Fair Monday, April 3 at 6:30 PM Covington, KY

Research methods

Defining events

"Off-campus recruiting events" defined as off-campus events hosted by paid staff/consultants focused on soliciting applications

- Event type
 - Include: college fairs, high school visits, community college visits, counselor events
 - Exclude: admitted or committed student events, interviews
- Event host
 - Include: paid admissions staff or consultants (e.g. regional recruiters)
 - Exclude: alumni, student volunteers
- Event location
 - Any off-campus location
 - e.g., high school, community college, hotel, convention center, cafe, etc.

Data and Methods

Summary of Data Collection Sources and Quality Checks Performed

| | Alabama | UC Berkeley | UC Irvine | Georgia | UMass | Nebraska |
|--|-----------|-------------|------------------|---------|--------------|----------|
| Web-scrape data collection | | | | | | |
| Scraped data on off-campus recruiting events? | Y | Y | Y | Y | Y | Y |
| Manually checked each scraped event? | Y | Y | Y | Y | Y | Y |
| Public records request data collection | | | | | | |
| Requested data from Enrollment Management VP from university? | Y | Y | Y | Y | Y | Y |
| Received data from Enrollment Management VP? | N | N | N | Y | N | N |
| State law allows nonresidents to request from public universities? | Ambiguous | Y | Y | N | Y | Y |
| Made public records request to university? | Y | Y | Y | N | Y | Y |
| Received public records data from university (by 3/18/2019)? | N | N | Y | - | Y | N |
| Manually checked each visit from requested data? | - | - | Y | Y | Y | - |
| Data used in report analyses | | | | | | |
| Web-scrape data is primary data source? | Y | Y | N | N | N | Y |
| Public records data used as primary data source? | N | N | Y | Y | Y | N |

Research methods

Research design and analyses

Quantitative multiple case study research design (Korzilius, 2010)

- Quantitative data collection and quantitative analyses
- Analyze each case separately, rather than pooling across cases as in large-N, random sample design

Data analysis (Eisenhardt, 1989; Pratt, Rockmann, and Kaufmann, 2006)

- "Within-case" analyses of recruiting patterns
 - Broad focus on income, race, achievement (main independent variables of interest)
 - Situate within local context; "deep dive" of in-state, out-of-state, and overall patterns
 - · Simple descriptive statistics (e.g., counts), static visualizations, interactive maps
 - · Linear probability models controlling for "rational" reasons for visit (e.g., enrollment size, achievement, distance)
 - Identify first-order empirical themes
- "Cross-case" analyses
 - Consolidate first-order findings into broader empirical themes

Research methods

Analysis sample

| | Alabama | UC Berkeley | UC Irvine | Georgia | UMass | Nebraska | Population (N = 80) |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------|
| Academic Profile | | | | | | | |
| US News & World Report Ranking | 103 | 20 | 39 | 56 | 74 | 111 | 94 |
| 25th Percentile SAT/ACT Score | 1,053 | 1,316 | 1,078 | 1,165 | 1,135 | 1,027 | 1,085 |
| 75th Percentile SAT/ACT Score | 1,351 | 1,527 | 1,334 | 1,360 | 1,332 | 1,262 | 1,300 |
| Enrollment | | | | | | | |
| Total Enrolled Freshmen | 7,559 | 6,252 | 6,551 | 5,433 | 4,679 | 4,860 | 4,957 |
| % Out-of-State Freshmen | 68.1% | 24.4% | 25.8% | 12.3% | 26.9% | 29.9% | 25.4% |
| % Pell Recipients | 17.0% | 19.4% | 37.8% | 20.3% | 21.5% | 23.9% | 24.0% |
| Tuition and Fees | | | | | | | |
| In-State Tuition + Fees | \$10,701 | \$13,807 | \$13,654 | \$11,890 | \$15,301 | \$8,725 | \$11,026 |
| Out-of-State Tuition + Fees | \$27,544 | \$41,076 | \$40,924 | \$30,502 | \$32,914 | \$23,558 | \$29,441 |
| Revenues | | | | | | | |
| Net Tuition Revenue | \$493,397,152 | \$852,825,280 | \$534,855,840 | \$463,142,400 | \$382,249,088 | \$227,792,208 | \$379,065,984 |
| % Total Revenue from Tuition | 39.0% | 31.2% | 17.5% | 29.6% | 30.6% | 20.3% | 26.3% |
| Total State Appropriations | \$158,247,648 | \$411,178,720 | \$329,859,744 | \$445,318,208 | \$353,021,024 | \$286,740,832 | \$267,926,000 |
| Appropriation per Student | \$4,450 | \$9,992 | \$9,548 | \$11,879 | \$12,578 | \$12,561 | \$7,903 |

Note: Author calculations based on 2016-2017 IPEDS. Population of universities includes universities categorized as Highest Research Activity by 2015 Carnegie Classification. The University of Alabama is the only institution in the study sample that is not classified as Highest Research Activity.

Within-case results

Click on a university see within-case results

N refers to total number of off-campus recruiting visits

- North Carolina State University (N=371)
- Rutgers University-New Brunswick (N=1,629)
- Stony Brook University (N=1,101)
- University of Alabama (N=4,349)
- University of Arkansas (N=1,013)
- University of California-Berkeley (N=906)
- University of California-Irvine (N=939)
- University of Cincinnati (N=1,369)

- University of Colorado-Boulder (N=1,568)
- University of Georgia (N=885)
- University of Kansas (N=1,419)
- University of Massachusetts-Amherst (N=1,137)
- University of Nebraska-Lincoln (N=1,421)
- University of Pittsburgh (N=1,233)
- University of South Carolina-Columbia (N=1,495)

Cross-university resultsNumber of events by type and in-state, out-of-state

| | Total Events | | Out-o | f-State | | | | In-State | | |
|-------------|---------------------|-------|--------|---------|-------|-------|--------|----------|-----|-------|
| | | Total | Pub HS | Priv HS | Other | Total | Pub HS | Priv HS | CC | Other |
| Alabama | 4,349 | 3,957 | 2,312 | 934 | 711 | 392 | 157 | 54 | 124 | 57 |
| UC Berkeley | 906 | 420 | 188 | 134 | 98 | 486 | 269 | 35 | 121 | 61 |
| UC Irvine | 939 | 172 | 77 | 40 | 55 | 767 | 330 | 20 | 322 | 95 |
| Georgia | 885 | 587 | 287 | 233 | 67 | 298 | 203 | 69 | 1 | 25 |
| UMass | 1,137 | 784 | 504 | 230 | 50 | 353 | 238 | 62 | 36 | 17 |
| Nebraska | 1,421 | 875 | 646 | 104 | 125 | 546 | 445 | 55 | 20 | 26 |
| | | | | | | | | | | |
| NC State | 371 | 124 | 72 | 20 | 32 | 247 | 157 | 3 | 55 | 32 |
| Rutgers | 1,629 | 954 | 560 | 231 | 163 | 675 | 477 | 72 | 89 | 37 |
| Stony Brook | 1,101 | 666 | 496 | 107 | 63 | 435 | 326 | 39 | 33 | 37 |
| Arkansas | 1,013 | 788 | 483 | 204 | 101 | 225 | 162 | 21 | 16 | 26 |
| Cincinnati | 1,369 | 815 | 491 | 204 | 120 | 554 | 408 | 79 | 22 | 45 |
| CU Boulder | 1,568 | 1,102 | 607 | 362 | 133 | 466 | 256 | 17 | 154 | 39 |
| Kansas | 1,419 | 1,004 | 613 | 213 | 178 | 415 | 304 | 22 | 28 | 61 |
| Pittsburgh | 1,233 | 906 | 559 | 210 | 137 | 327 | 211 | 51 | 37 | 28 |
| S.Carolina | 1,495 | 1,245 | 676 | 328 | 241 | 250 | 197 | 22 | 2 | 29 |

Note: Totals for schools include multiple visits to unique schools.

Deep-dive results

Descriptive statistics for public high school visits

| | Ala | bama | UC B | erkeley | UC | Irvine | Ge | orgia | Ul | Mass |
|---------------------------------|-------|----------|-------|----------|-------|----------|-------|----------|-------|------|
| | Visit | Nonvisit | Visit | Nonvisit | Visit | Nonvisit | Visit | Nonvisit | Visit | Nor |
| Number of High Schools | 1,711 | 13,255 | 178 | 10,893 | 74 | 7,521 | 249 | 9,333 | 496 | 8, |
| Miles from University | 831 | 836 | 1,933 | 1,917 | 1,155 | 1,805 | 920 | 808 | 675 | 1, |
| Grade 12 Enrollment | 384 | 169 | 459 | 183 | 471 | 191 | 490 | 201 | 380 | 2 |
| Median Household Income (\$000) | \$90 | \$60 | \$104 | \$62 | \$93 | \$66 | \$102 | \$62 | \$115 | \$ |
| Percent Free or Reduced Lunch | 30.4 | 51.7 | 23.1 | 49.2 | 29.3 | 46.9 | 22.6 | 51.2 | 21.4 | 5 |
| Percent Enrollment by Race | | | | | | | | | | |
| Black, Latinx, Native American | 30.3 | 38.0 | 30.4 | 37.4 | 29.9 | 35.5 | 29.6 | 40.9 | 24.5 | 43 |
| White | 59.9 | 56.8 | 51.7 | 57.6 | 44.5 | 58.4 | 56.1 | 53.4 | 61.6 | 50 |
| Black | 13.8 | 16.3 | 15.0 | 18.1 | 8.1 | 15.7 | 10.3 | 17.1 | 8.5 | 1′ |
| Latinx | 16.1 | 20.5 | 15.1 | 18.1 | 21.3 | 18.3 | 19.0 | 22.3 | 15.7 | 2: |
| Native American | 0.4 | 1.2 | 0.3 | 1.2 | 0.5 | 1.5 | 0.3 | 1.5 | 0.2 | 0 |
| Asian | 6.7 | 2.8 | 14.1 | 2.6 | 16.4 | 3.4 | 11.2 | 3.2 | 11.5 | 3 |
| Other Race | 3.2 | 2.4 | 3.8 | 2.3 | 9.1 | 2.7 | 3.1 | 2.6 | 2.4 | 2 |
| School Type | | | | | | | | | | |
| 0/1 is a Charter School | 0.04 | 0.11 | 0.06 | 0.08 | 0.03 | 0.10 | 0.05 | 0.10 | 0.02 | 0. |
| 0/1 is a Magnet School | 0.09 | 0.05 | 0.18 | 0.06 | 0.14 | 0.06 | 0.12 | 0.06 | 0.09 | 0. |

Deep-dive results

Note: Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school. Non-visited schools include only out-of-state schools in states that received at least one high school visit.

Probability of out-of-state public high school receiving a visit

| | Alabama | UC Berkeley | UC Irvine | Georgia | UMass | Nebraska | NC State |
|-----------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|---------------------|
| Income | | | | | | | |
| (ref=<\$50k) | | | | | | | |
| \$50k-\$74k | 0.004 (0.004) | -0.003 (0.002) | -0.001 (0.002) | -0.004 (0.003) | -0.011*** (0.003) | 0.001 (0.005) | -0.001 (0.002) |
| \$75k-\$99k | 0.081*** (0.009) | 0.006 (0.004) | 0.006 (0.004) | 0.008 (0.006) | 0.022** (0.007) | 0.049*** (0.010) | 0.005 (0.005) |
| \$100k-\$149k | 0.207*** (0.014) | 0.060*** (0.009) | 0.042*** (0.008) | 0.068*** (0.011) | 0.178*** (0.013) | 0.191*** (0.025) | 0.047*** (0.009) |
| \$150k-\$199k | 0.415*** (0.041) | 0.193*** (0.045) | 0.033 (0.020) | 0.168*** (0.041) | 0.444*** (0.049) | 0.225* (0.089) | 0.166*** (0.047) |
| \$200k+ | 0.481*** (0.075) | 0.241** (0.089) | 0.005 (0.005) | 0.362*** (0.108) | 0.654*** (0.078) | 0.084 (0.129) | 0.104 (0.077) |
| BL, LX, NA Enrollment | | | | | | | |
| (ref=<20%) | | | | | | | |
| 20-39% | 0.030*** (0.008) | -0.002 (0.004) | -0.004 (0.004) | 0.003 (0.005) | -0.016* (0.008) | 0.023* (0.009) | 0.002 (0.006) |
| 40-59% | -0.011 | -0.015*** | 0.002 | -0.011* | -0.030*** | 0.002 | -0.012* |
| Observations | 14,966 | 11,071 | 7,595 | 9,582 | 9,293 | 6,423 | 5,255 |
| Akaike Inf. Crit. | 4,098.966 | -15,443.180 | -14,152.570 | -9,137.670 | -3,464.868 | -1,616.831 | -8,194.420 |

Deep-dive results

Note: *p<0.05; **p<0.01; ***p<0.001; Dependent Variable: Received a recruiting visit (0/1); Robust standard errors in parentheses; Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school. Non-visited schools include only out-of-state schools in states that received at least one high school visit.

Descriptive statistics for private high school visits

| | Ala | bama | UC B | erkeley | UC | Irvine | Ge | orgia | \mathbf{U} | Mass |
|--------------------------------|-------|----------|-------|----------|-------|----------|-------|----------|--------------|---------|
| | Visit | Nonvisit | Visit | Nonvisit | Visit | Nonvisit | Visit | Nonvisit | Visit | Nonvisi |
| Number of High Schools | 681 | 2,788 | 130 | 2,444 | 37 | 1,852 | 192 | 2,152 | 218 | 2,254 |
| Grade 12 Enrollment | 125 | 55 | 123 | 64 | 188 | 69 | 134 | 62 | 149 | 63 |
| Percent Enrollment by Race | | | | | | | | | | |
| Black, Latinx, Native American | 17.0 | 21.1 | 16.4 | 21.0 | 16.7 | 20.6 | 13.5 | 22.8 | 16.1 | 23.0 |
| White | 71.0 | 68.4 | 69.8 | 70.0 | 49.4 | 68.7 | 74.5 | 65.8 | 69.4 | 65.2 |
| Black | 7.1 | 11.0 | 7.8 | 11.4 | 5.6 | 10.8 | 5.9 | 11.3 | 6.6 | 11.3 |
| Latinx | 9.5 | 9.6 | 8.1 | 9.2 | 9.6 | 9.3 | 7.2 | 11.2 | 9.1 | 11.3 |
| Native American | 0.4 | 0.5 | 0.6 | 0.4 | 1.4 | 0.6 | 0.5 | 0.3 | 0.4 | 0.3 |
| Asian | 7.2 | 6.9 | 8.2 | 5.7 | 15.5 | 6.9 | 6.8 | 7.3 | 8.6 | 7.7 |
| Other Race | 4.9 | 3.6 | 5.6 | 3.3 | 18.5 | 3.8 | 5.2 | 4.1 | 5.9 | 4.1 |
| Locale | | | | | | | | | | |
| In a City | 0.49 | 0.38 | 0.57 | 0.38 | 0.54 | 0.38 | 0.60 | 0.38 | 0.47 | 0.41 |
| In a Suburb | 0.41 | 0.38 | 0.36 | 0.40 | 0.30 | 0.45 | 0.33 | 0.41 | 0.42 | 0.40 |
| In a Town | 0.02 | 0.07 | 0.01 | 0.06 | 0.03 | 0.04 | 0.00 | 0.06 | 0.01 | 0.05 |
| In a Rural Area | 0.09 | 0.17 | 0.06 | 0.16 | 0.14 | 0.13 | 0.07 | 0.15 | 0.10 | 0.14 |

Deep-dive results

Note: Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not special education school, an alternative school, or a virtual school. Non-visited schools include only out-of-state schools in states that received at least one high school visit.

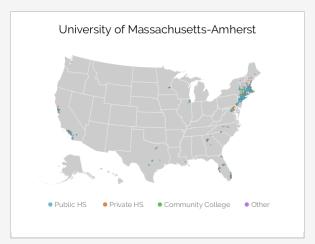
Small multiple map of recruiting visits

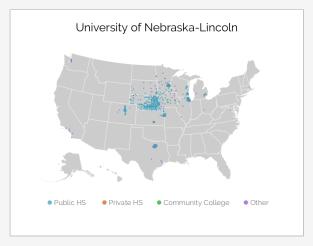












Deep-dive results

Descriptive statistics for public high school visits

| | Ala | bama | UC Berkeley UC Irvine Georgia | | orgia | U | Mass | | | |
|---------------------------------|-------|----------|-------------------------------|----------|-------|----------|-------|----------|-------|------------|
| | Visit | Nonvisit | Visit | Nonvisit | Visit | Nonvisit | Visit | Nonvisit | Visit | Nor |
| Number of High Schools | 113 | 228 | 244 | 1,160 | 232 | 1,172 | 173 | 245 | 216 | 1 |
| Percent of High Schools | 33.1 | 66.9 | 17.4 | 82.6 | 16.5 | 83.5 | 41.4 | 58.6 | 62.1 | 3′ |
| Miles from University | 98 | 101 | 171 | 250 | 131 | 216 | 85 | 98 | 61 | ϵ |
| Grade 12 Enrollment | 204 | 97 | 446 | 272 | 467 | 269 | 313 | 207 | 214 | 1 |
| Number Proficient-Math | 53 | 14 | 143 | 74 | 129 | 77 | 141 | 71 | 179 | 1 |
| Median Household Income (\$000) | \$54 | \$44 | \$86 | \$67 | \$69 | \$71 | \$61 | \$50 | \$95 | \$ |
| Percent Free or Reduced Lunch | 44.3 | 60.3 | 50.6 | 58.4 | 61.6 | 56.2 | 55.5 | 68.0 | 32.9 | 48 |
| Percent Enrollment by Race | | | | | | | | | | |
| Black, Latinx, Native American | 33.0 | 38.8 | 54.9 | 59.7 | 68.4 | 56.9 | 50.1 | 52.2 | 21.8 | 3. |
| White | 64.3 | 59.8 | 25.6 | 28.9 | 17.5 | 30.5 | 43.1 | 43.7 | 70.4 | 60 |
| Black | 27.2 | 33.4 | 6.1 | 6.5 | 8.6 | 6.0 | 40.3 | 42.2 | 8.6 | 12 |
| Latinx | 4.7 | 4.2 | 48.2 | 51.9 | 59.2 | 49.7 | 9.6 | 9.7 | 13.0 | 20 |
| Native American | 1.2 | 1.3 | 0.6 | 1.2 | 0.6 | 1.2 | 0.2 | 0.2 | 0.2 | 0 |
| Asian | 1.4 | 0.4 | 15.3 | 8.0 | 11.1 | 8.9 | 4.0 | 1.5 | 5.4 | 2 |
| Other Race | 1.2 | 1.0 | 4.2 | 3.4 | 3.0 | 3.7 | 2.8 | 2.6 | 2.4 | 2 |
| School Type | | | | | | | | | | |

Deep-dive results

Note: Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school.

Regression: probability of in-state public high school receiving a visit

| | Alabama | UC Berkeley | UC Irvine | Georgia | UMass | Nebraska | NC State | Rutger |
|-----------------------|-------------------|---------------------|----------------------|---------------------|----------------------|-------------------|---------------------|------------------|
| Income | | | | | | | | |
| (ref = < \$50k) | | | | | | | | |
| \$50k-\$74k | -0.043 (0.057) | 0.079*** (0.021) | -0.056* (0.024) | -0.058 (0.062) | 0.181 (0.103) | -0.020 (0.076) | -0.131** (0.042) | -0.153 (0.106 |
| \$75k-\$99k | 0.016 (0.117) | 0.114*** (0.029) | -0.059* (0.030) | -0.010 (0.115) | 0.114 (0.111) | -0.115 (0.107) | 0.081 (0.102) | -0.140 (0.114 |
| \$100k-\$149k | | 0.097* (0.042) | -0.092* (0.041) | 0.096 (0.133) | 0.206 (0.112) | -0.049 (0.104) | -0.145 (0.135) | -0.067 (0.121 |
| \$150k-\$199k | | 0.352*** (0.097) | -0.251*** (0.062) | 0.431*** (0.118) | 0.288* (0.141) | | | 0.131 (0.146 |
| \$200k+ | | -0.099 (0.131) | -0.292*** (0.056) | | -0.625*** (0.137) | | | 0.192 (0.156 |
| BL, LX, NA Enrollment | | | | | | | | |
| (ref=<20%) | | | | | | | | |
| 20-39% | -0.046 (0.061) | 0.005 (0.044) | 0.020 (0.032) | 0.045 (0.078) | 0.024 (0.085) | 0.052 (0.056) | -0.157** (0.059) | 0.079 (0.072 |
| 40-59% | -0.089 | 0.069 | 0.087* | 0.062 | 0.033 | -0.172 | -0.064 | 0.189 |
| Observations | 341 | 1,404 | 1,404 | 418 | 348 | 247 | 504 | 400 |
| Akaike Inf. Crit. | 364.784 | 994.316 | 1,033.760 | 563.412 | 475.712 | 166.755 | 575.111 | 541.53 |

Deep-dive results

Note: *p<0.05; **p<0.01; ***p<0.001; Dependent Variable: Received a recruiting visit (0/1); Robust standard errors in parentheses; Schools that satisfied the following criteria were included in the sample: offers grades 9-12 and enrolls at least ten students in each grade; located in the 50 U.S. states, the District of Columbia, or land regulated by the Bureau of Indian Affairs; is not a special education school, alternative school, virtual school, or independent school.

SummarySummary of results

Out of State Recruiting

- Majority of visits are out-of-state (exceptions: UC Irvine, UC Berkeley); in populous metros
- Income bias; visits concentrated in highly affluent communities, in metropolitan areas
- Racial bias; less likely to visit schools with predominantly Black/Hispanic/Native students
- Disproportionate number of visits to private high schools

In-State Recruiting

- Variation in coverage of public high schools (e.g., Nebraska=88%; Alabama=33%)
- Income bias (most cases, but less than out-of-state) even after controlling for "rational" reasons
- Bias against schools with predominantly Black/Hispanic/Native in some cases (e.g., Alabama)
- Rural bias; in some cases even after controlling for other factors (e.g. UC Irvine)

Recruiting for Resources (RDT) or Recruiting Market Values (AC)

- o RDT: focus on out-of-state recruiting is linked to declines in state funding
 - Universities with the worst state funding have the most out-of-state visits (Berkeley vs. Irvine)
- o AC: out-of-state recruiting focus and biases are only partly a function of unfavorable environment
 - Cases with relatively more better environmental conditions do not have a lesser focus on outof-state (e.g., UMass Amherst, Nebraska)

Discussion

Implications, future research

Implications

- Results suggest dramatic income bias in enrollment priorities of public research universities
 - Evidence of racial bias (especially in out-of-state recruiting), but patterns more nuanced
- Policy discourse should focus on enrollment priorities, rather than student, K-12 deficiencies
 - "Under-recruiting" as an alternative explanation for "under-matching"

Policy + Advocacy Reccomendations: how do we change university enrollment priorities?

- Increasing state appropriations and state need-based grant aid
- Nonresident enrollment caps
- Empower local access advocates

Future research

- Manuscript that focuses on spatial discrimination of communities of color
- Collect/analyze data on other means used to identify and target prospects
 - Characteristics universities prioritize when purchasing "prospect lists" from College Board/ACT?
 - Experimental audits of university responses to "inquiries" with different characteristics

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References

- [1] G. F. Davis. "Firms and environments". In: *The handbook of economic sociology*. Ed. by N. J. Smelser and R. Swedberg. New York: Russell Sage Foundation, 2005, pp. 478-502. ISBN: 0691034486 (alk. paper).
- [2] S. Dynarski, C. J. Libassi, K. Michelmore, et al. "Closing the Gap: The Effect of a Targeted, Tuition-Free Promise on College Choices of High-Achieving, Low-Income Students". In: *National Bureau of Economic Research Working Paper Series* No. 25349 (2018). DOI: 10.3386/w25349. URL: http://www.nber.org/papers/w25349.
- [3] K. M. Eisenhardt. "Building theories from case study research". In: Academy of Management Review 14.4 (1989), pp. 532-550. ISSN: 0363-7425.
- [4] G. C. Galster and S. P. Killen. "The geography of metropolitan opportunity: A reconnaissance and conceptual framework". In: *Housing Policy Debate Housing Policy Debate* 6.1 (1995), pp. 7–43.
- [5] A. Hanson. "Do college admissions counselors discriminate? Evidence from a correspondence-based field experiment". In: *Economics of Education Review* 60 (2017), pp. 86-96. ISSN: 0272-7757. DOI: https://doi.org/10.1016/j.econedurev.2017.08.004. URL: http://www.sciencedirect.com/science/article/pii/S0272775716304526.
- [6] N. W. Hillman. "Geography of College Opportunity: The Case of Education Deserts". In: American Educational Research Journal 53.4 (2016), pp. 987–1021.
- [7] M. M. Holland. Divergent pathways to college: Race, class, and inequality in high schools. New Brunswick, NJ: Rutgers University Press, 2019.
- [8] H. Korzilius. "Quantitative Analysis in Case Study". In: *Encyclopedia of case study research*. Ed. by A. J. Mills, G. Durepos and E. Wiebe. Thousand Oaks: SAGE Publications, Inc., 2010, pp. 760-764.
- [9] J. W. Meyer and B. Rowan. "Institutionalized organizations: formal structure as myth and ceremony". In: *The American Journal of Sociology* 83.2 (1977), pp. 340-363.
- [10] R. Noel-Levitz. 2018 marketing and student recruitment report of effective practices. Tech. rep. Ruffalo Noel-Levitz, 2018. URL: http://learn.ruffalonl.com/rs/395-EOG-977/images/RNL_2018_Student_Recruitment_Marketing_Report_EM-19.pdf.
- [11] J. Pfeffer and G. R. Salancik. The external control of organizations: A resource dependence perspective. New York: Harper and Row, 1978, p. xiii, 300 p. ISBN: 0060451939.
- [12] M. G. Pratt, K. W. Rockmann and J. B. Kaufmann. "Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents". In: *Academy of Management Journal* 49.2 (2006), pp. 235-262. ISSN: 0001-4273. DOI: 10.5465/amj.2006.20786060. URL: <Go to ISI>://WOS:000237198600007.
- [13] G. Rhoades. "The Higher Education We Choose, Collectively: Reembodying and Repoliticizing Choice". In: *The Journal of Higher Education* 85.6 (2014), pp. 917–930. DOI: 10.1080/00221546.2014.11777353.
- [14] S. Slaughter and G. Rhoades. *Academic capitalism and the new economy: markets, state, and higher education*. Baltimore: Johns Hopkins University Press, 2004. ISBN: 0801879493 9780801879494 0801892333 9780801892332.
- [15] M. L. Stevens. *Creating a class: College admissions and the education of elites*. Cambridge, MA: Harvard University Press, 2007, p. 308 p. ISBN: 9780674026735 (alk. paper) 067402673X (alk. paper).
- [16] J. Thompson. Organizations in action. New York: McGraw Hill, 1967.
- [17] T. Thornhill. "We Want Black Students, Just Not You: How White Admissions Counselors Screen Black Prospective Students". In: *Sociology of Race and Ethnicity* 0.0 (). DOI: 10.1177/2332649218792579. URL: https://journals.sagepub.com/doi/abs/10.1177/2332649218792579.