Recruiting Chapter

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Introduction

Salazar, Jaquette, & Han (forthcoming) analyzed off-campus recruiting visits made in 2017 by 15 public research universities

- 12 of the 15 universities made more visits to out-of-state high schools than in-state high schools
- Salazar, Jaquette, & Han (forthcoming) focused on visits to public high schools, finding that out-of-state visits focused on schools in affluent, predominantly white communities
- However, Salazar, Jaquette, & Han (forthcoming) also found that public research universities made a disproportionate number of out-of-state visits to private high schools. For example
  - *University of Pittsburgh.* 170 (28%) out of 605 out-of-state high school visits were to private high schools
  - *University of California-Berkeley.* 155 (43%) out of 360 out-of-state high school visits were to private high schools
  - *University of Colorado-Boulder.* 321 (36%) out of 901 out-of-state high school visits were to private high schools

This chapter analyzes visits to private high schools by public research universities in comparison to visits to private high schools by selective private universities.

The privatization literature

This chapter contributes to scholarship on the "privatization" of public higher education by connecting this literature to . . . .

McClure, Barringer, & Brown (2019) review scholarship on privatization in higher education

- One sub-literature conceptualizes privatization as a process whereby declines in government funding cause public institutions to grow alternative revenue sources, particularly revenue from tuition and research commercialization
  - Of relevance to this chapter, public universities responded to declines in state appropriations by growing enrollment from nonresident students (Jaquette & Curs, 2015), who typically pay two- to three-times more than resident students
- Another sub-literature conceptualizes privatization as a process whereby public institutions become more similar to for-profit or private nonprofit sector organizations
  - A weakness of this literature is that few empirical studies analyze public institutions on a behavior associated with private institutions

The traditional mission of selective private universities vs. public research universities

- Selective private universities
  - Historically, these institutions serve the mission of social reproduction, defined as prioritizing access for affluent, college-educated households
    * (and at sectarian institutions, prioritizing access for students who share religious ideology of the institution)

- – Visits to private high schools are consistent with this social reproduction mission
- Public research universities
    - – "public good" mission in access to public flagship/research universities
        - ∗ Contribute to economic and civic development by enrollinghigh achieving state residents who will be future civic, professional, and business leaders of the state
        - ∗ Contribute to *social mobility* in the state, by prioritizing the enrollment of high-achieving first-generation, low-income, and (more recently) non-white state residents
    - – Visits to private high schools – particularly out-of-state private high schools – are antithetical to this public good access mission

Therefore, we conceptualize recruiting visits to private high schools as an ideal-type behavioral example of public flagship universities engaging in a behavior associated with the traditional social reproduction mission of selective private non-profit universities

- By analyzing visits to private high schools by public research universities and comparing them to visits made by selective private universities, we hope to develop broader insights about the privatization of public research universities

Research questions

Analyses are motivated by three research questions

1. How does the scale of visits to private high schools by public research universities compare to the scale of visits to private high schools by private universities?
2. How do the characteristics of private high schools visited by public research universities compare to the characteristics of private high schools
3. To what extent do public research universities and private universities visit overlapping sets of private high schools?

For each research questions we look for: similarities and differences within public research universities; similarities and differences between public and private universities

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summary(cars)
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##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
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Background and literature review

This section provides context for our analyses of off-campus recruiting visits. First, we situate off-campus recruiting within the broader set of marketing and recruiting interventions in higher education and review what market research says about off-campus recruiting.

Background

The "enrollment funnel" – depicted in Figure @ref(fig:em-funnel) – is a conceptual heuristic that identifies stages in the student recruitment process (prospects, inquiries, applicants, accepted applicants, and enrolled

students). The enrollment management industry uses the enrollment funnel to inform marketing and recruiting interventions that target specific stages.

- "Prospects" are "all the potential students you would want to attract to your institution" (Campbell, 2017).
- "Inquiries" are prospects that contact the institution, including those who respond to a solicitation and those who reach out on their own.

Figure 1: The enrollment funnel

What do we know about off-campus recruiting from market research?

- Market research describes off-campus recruiting visits as a means of identifying prospects and deepening engagement with prospects already being targeted through mail/email (Clinedinst & Koranteng, 2017; Noel-Levitz, 2020; Ruffalo Noel-Levitz, 2018).
- Ruffalo Noel-Levitz (2018) documents the self-reported efficacy of marketing/recruiting interventions.
  – For the median private 4-yr institution, off-campus visits were the second highest source of inquiries (after student list purchases), accounting for 17% of inquiries, and tied with student list purchases

Table 1: Percentage of budget allocated to marketing/recruiting activities by private non-profit 4yr and public 4yr institutions

Activity	Private	Public
Travel	17	16
Student search (purchased lists)	14	12
Prospective student communications	13	17
Events	12	11
Recruitment publications	11	15
Web services and digital advertising	11	13
Traditional advertising	6	6
International recruitment	5	3
Transfer recruitment	4	4
Other	8	3

as the highest source of enrollees, accounting for 18% of enrollees.
  – For the median public institution, off-campus visits accounted for 19% of inquiries (second only to student list purchases) and accounted for 16% of enrollees (ranked third after stealth applicants and on-campus visits).
• With respect to expenditure, Table @ref(tab:ug-recruit-budget), reproduced from Noel-Levitz (2020), shows the percentage of undergraduate recruitment budget allocated to different marketing and recruiting activities

Literature review

We review empirical scholarship from sociology that analyzes recruiting by colleges and universities, emphasizing scholarship that analyzes off-campus recruiting and scholarship that considers private high schools.

A case study literature in sociology analyzes recruiting, often as part of a broader analysis of enrollment management or college access (Cookson & Persell, 1985; Cottom, 2017; e.g., Holland, 2019; Khan, 2010, 2011; McDonough, 1997; Posecznick, 2017; Stevens, 2007).

• Stevens (2007) and Khan (2010, 2011) are particularly relevant to the present chapter because these studies analyze relationships between college admissions counselors and high school guidance counselors.

Stevens (2007), an ethnography of the admissions office at a selective private liberal arts college, highlights the relational function of visits.

• Stevens (2007, p. 54) states that "the College's reputation and the quality of its applicant pool are dependent upon its connections with high schools nationwide."
• Whereas market research by Ruffalo Noel-Levitz (2018) highlights the effect of recruiting visits on inquiries and enrollees, findings from Stevens (2007) suggest that the College may have valued recruiting visits primarily as a means of maintaining relationships with guidance counselors.
• The College tended to visit the same "feeder" schools year after year because recruiting depends on long-term relationships with high schools.
• The high schools they visited tend to be affluent schools – in particular, private schools – that enroll high-achieving students who can afford tuition and had the resources and motivation to host a successful visit.

Khan (2010) analyzed recruiting from the perspective of an elite private boarding school in order to understand "how such schools continue to get comparatively under-qualified students into top colleges and universities" (p. 98).

• What elite private colleges want
  – high achieving students who can pay tuition and donate

- low acceptance rates and high yield rates
    - "interesting characters" whose curricular and extracurricular strengths meet the demands of campus constituents
- Problem faced by elite private high schools
    - some of their students are stronger than others
- Problem faced by elite private colleges
    - Many outstanding applicants; but hard to get reliable information about which applicants will enroll if admitted
- How high school guidance counselors capitalize on this problem
    - tell colleges which high-achieving applicants are likely to accept admissions offer, which are likely to go elsewhere admissions offer and which are not
    - If a high-achieving applicant likely to go elsewhere, recommend the college consider an applicant with weaker academic credentials who would accept if admitted and brings extracurricular strengths the college values
- This horsetrading depends on
    - long-term relationship between high school and college, based on repeated interactions
    - small enough caseloads to advocate for each student

Rationale for treating off-campus recruiting visits as a relationship that can be analyzed using social network methods [from draft chapter]

> To summarize, Stevens (2007) finds that off-campus recruiting visits are important for the maintenance of strong relationships between a college and a high school. Strong relationships enable colleges and schools to negotiate and send trustworthy information to one another. In the absence of strong relationships, it is less likely that a college admissions counselor will "take the call" of a high school guidance counselor (Khan, 2010, 2011).

> Building on these ideas, we reason that the presence of a recruiting visit between a college and a high school is an indicator that the college and the high school have a relationship. First, the fact that the college made the effort to visit suggests that the college wants to enroll students from the high school. Second, the fact that the high school hosted the visit suggests that the high school likely views the college as a desirable destination for some of its students. Third, the presence of the recruiting visit suggests the probability of additional interactions (e.g., phone calls).

Methods

Data collection

Our broader project collected data on off-campus recruiting visits made by a convenience sample of colleges and universities during the 2017 calendar year.

The data collection sample comes from three different lists of postsecondary institutions:

- all public research-extensive universities as defined by the 2000 Carnegie Classification (N=102)
- all private universities in the top 100 of U.S. News and World Report National Universities rankings (N=58)
- all private colleges in the top 50 of U.S. News and World Report Liberal Arts Colleges rankings (N=47).

For each of these institutions, we investigated their admissions website for pages that posted their upcoming off-campus recruiting visits.

- For institutions that posted such pages, we scraped the pages once per week throughout 2017.
    - Many colleges and university only posted certain kinds of events (e.g., hotel receptions and national college fairs) but not others (e.g., day-time visits to high schools). These institutions are excluded from the analyses.
- For public universities, we also collected data using public records requests

The analysis sample for this chapter consists of:

- 15 public research universities,
- 13 private research universities
- 12 private liberal arts colleges [may cut from analysis sample]

Social network analysis

A social network consists of a set of actors – referred to as "vertices" – and the connections – referred to as "edges" between these actors.

- "one-mode" networks consist of vertices of the same "type" (e.g., in a publication network each vertex is an author)
- "two-mode" networks consist of vertices associated with one type of actor/entity having connections to vertices of another type. For example, an actor-movie network consists of actors (mode 1) who appear in movies (mode 2), and an actor shares an edge with a movie if the actor appears in the movie.

In our school-college two-mode network:

- the vertices are private high schools (mode 1) and colleges/universities (mode 2),
- An edge is defined as an off-campus recruiting visits made between the two (e.g., high school i shares an edge with college j if high school i receives at least one visit from college j).
- Visits can only occur between a school-college pair (not a school-school pair or a college-college pair).
- The resulting (weighted) network can be represented as a school-by-college matrix (e.g., a 500×40 matrix if our network contains 500 high schools and 40 colleges/universities) in which matrix cell $a_{i,j}$ identifies the number of visits that high school i received from college/university j.

Two-mode networks are often analyzed as one-mode networks for simplicity (Borgatti, 2008)

- we create a one-mode high school network in which two private high schools share an edge if they both receive a visit by the same college/university. Cell $s_{i,j}$ of the school-by-school matrix S indicates the number of colleges/universities that visited both school i and school j.
- Similarly, we create a one-mode college/university network (herein the college network) in which two colleges share an edge if both colleges visited the same high school. Cell $c_{i,j}$ of the college-by-college matrix C indicates the number of private high schools that received at least one visit from both college i and college j

Community detection

- Many social network analyses utilize data-driven "community detection" algorithms to categorize vertices into a small number of groups (or cluster) based purely on patterns of network ties.
- Generally, groups are chosen to maximize the number of within-group ties while minimizing ties between members of different groups.
- We performed hierarchical cluster analysis to allocate colleges and universities into clusters based on their private high schools visits.

Results

Analysis sample

RQ1: Scale of visits to private high schools

Number of events by type and in-state, out-of-state for public research universities institutions

Number of events by type and in-state, out-of-state for private institutions

Legend:
- Public HS
- Private HS
- Community College
- Other

In-State | Out-of-State

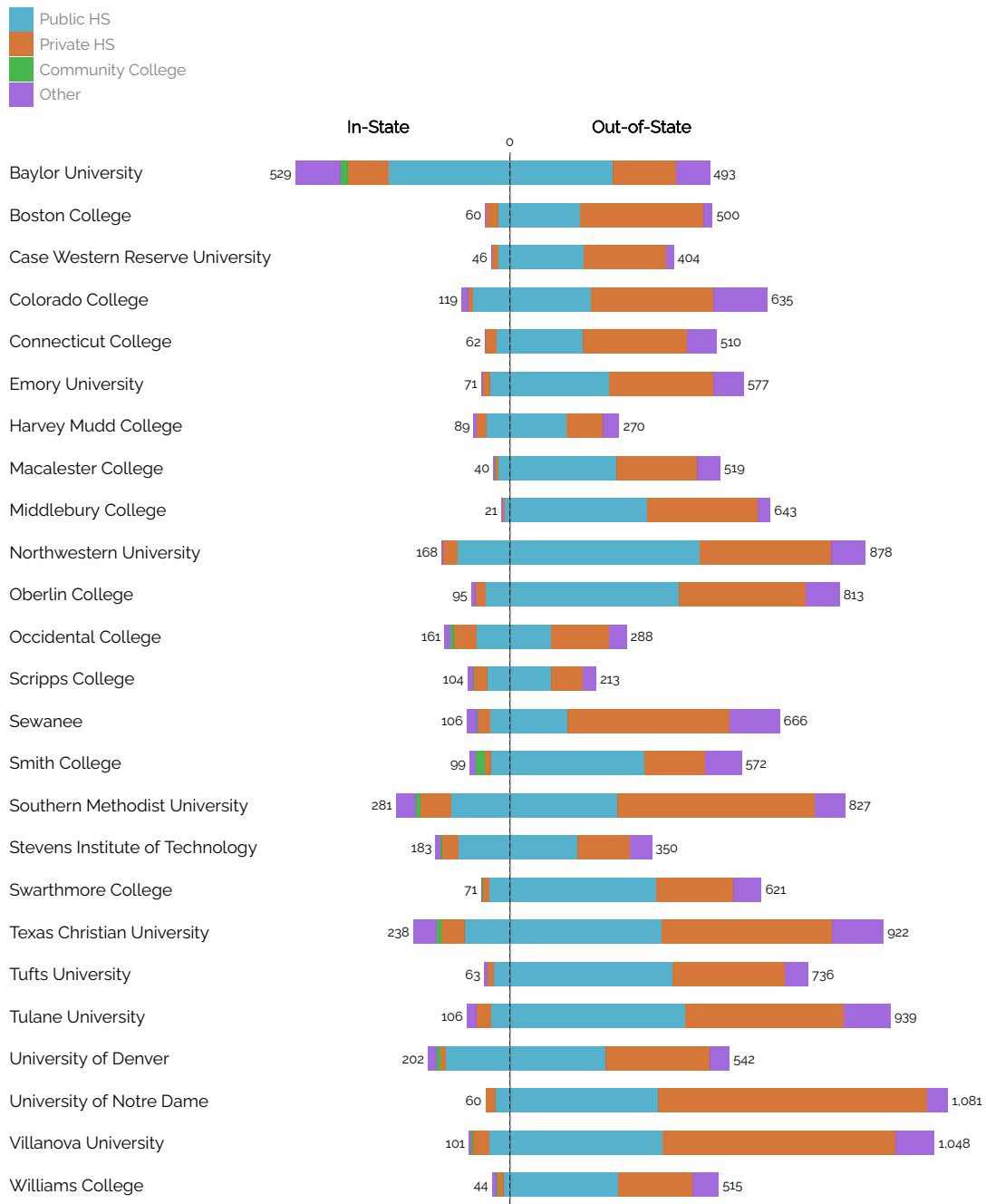| University	In-State	Out-of-State
Baylor University	529	493
Boston College	60	500
Case Western Reserve University	46	404
Colorado College	119	635
Connecticut College	62	510
Emory University	71	577
Harvey Mudd College	89	270
Macalester College	40	519
Middlebury College	21	643
Northwestern University	168	878
Oberlin College	95	813
Occidental College	161	288
Scripps College	104	213
Sewanee	106	666
Smith College	99	572
Southern Methodist University	281	827
Stevens Institute of Technology	183	350
Swarthmore College	71	621
Texas Christian University	238	922
Tufts University	63	736
Tulane University	106	939
University of Denver	202	542
University of Notre Dame	60	1,081
Villanova University	101	1,048
Williams College	44	515

Actual versus proportional visits to out-of-state private high schools for public research universities

University of Alabama — Actual 28% / Proportional 19% — N=2,392
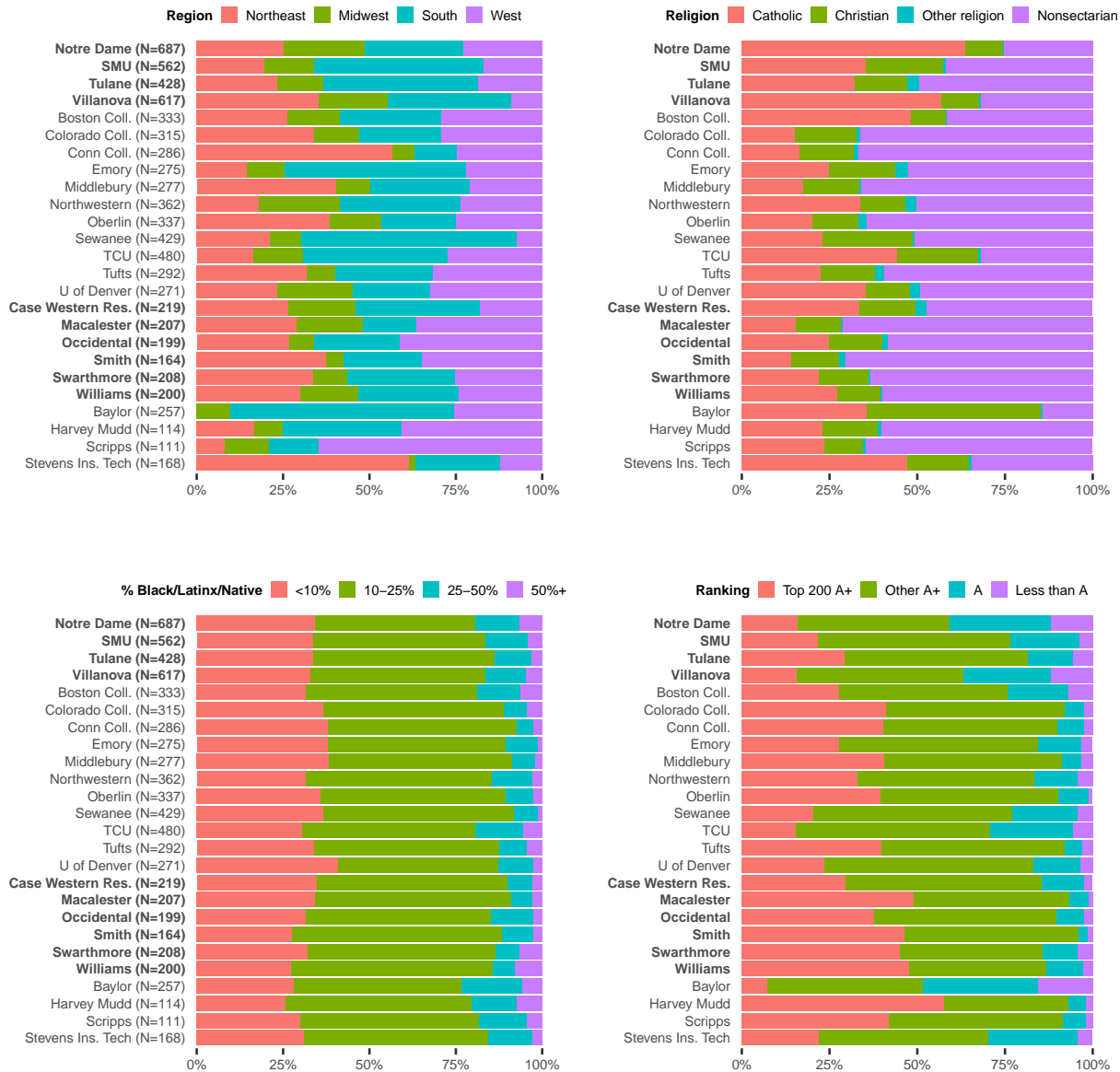
University of South Carolina-Columbia — Actual 33% / Proportional 19% — N=1,088

University of Colorado-Boulder — Actual 36% / Proportional 19% — N=901

University of Kansas — Actual 26% / Proportional 15% — N=588

Rutgers University-New Brunswick — Actual 30% / Proportional 21% — N=630

University of Pittsburgh — Actual 28% / Proportional 21% — N=605

University of Nebraska-Lincoln — Actual 14% / Proportional 14% — N=486

University of Cincinnati — Actual 29% / Proportional 20% — N=568

University of Arkansas — Actual 30% / Proportional 17% — N=473

University of Massachusetts-Amherst — Actual 31% / Proportional 21% — N=714

Stony Brook University — Actual 17% / Proportional 24% — N=490

University of Georgia — Actual 44% / Proportional 20% — N=441

University of California-Berkeley — Actual 43% / Proportional 19% — N=360

University of California-Irvine — Actual 33% / Proportional 20% — N=111

North Carolina State University — Actual 21% / Proportional 23% — N=89
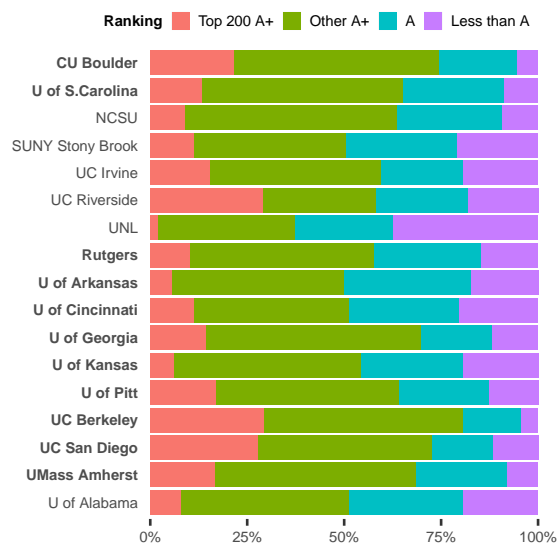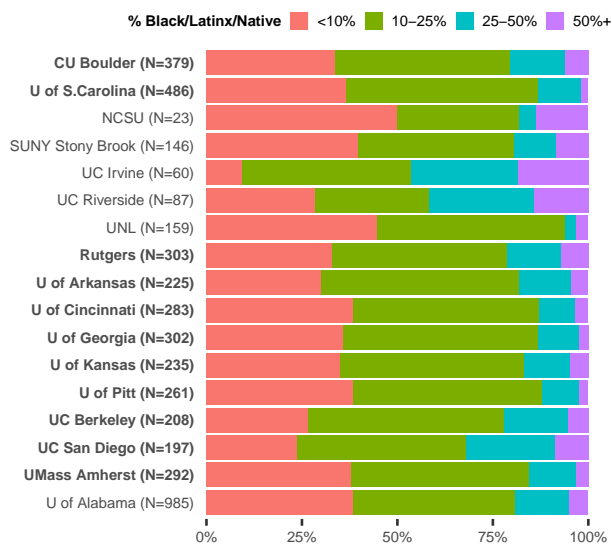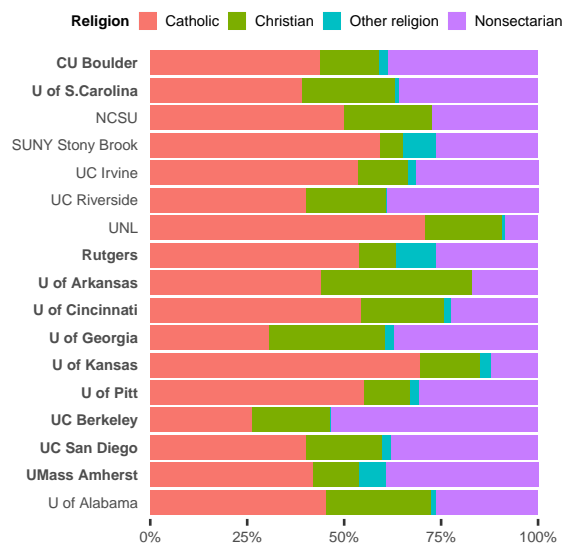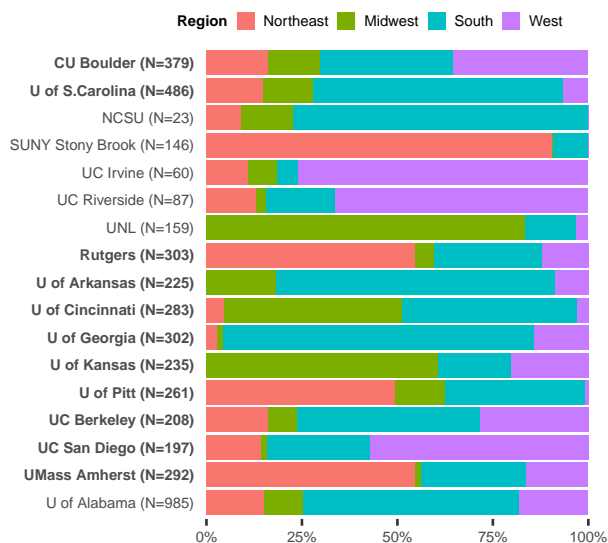
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RQ2: Characteristics of visits to private high schools

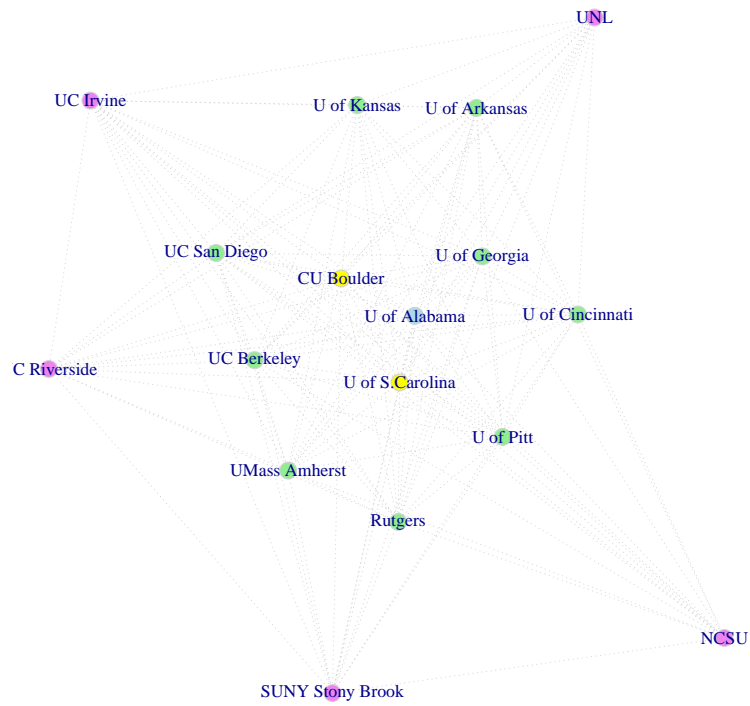## Characteristics of private HS visited by private institutions

Characteristics of private HS visited by public institutions

Region ■ Northeast ■ Midwest ■ South ■ West

CU Boulder (N=379)	
U of S.Carolina (N=486)	
NCSU (N=23)	
SUNY Stony Brook (N=146)	
UC Irvine (N=60)	
UC Riverside (N=87)	
UNL (N=159)	
Rutgers (N=303)	
U of Arkansas (N=225)	
U of Cincinnati (N=283)	
U of Georgia (N=302)	
U of Kansas (N=235)	
U of Pitt (N=261)	
UC Berkeley (N=208)	
UC San Diego (N=197)	
UMass Amherst (N=292)	
U of Alabama (N=985)	

Religion ■ Catholic ■ Christian ■ Other religion ■ Nonsectarian

% Black/Latinx/Native ■ <10% ■ 10–25% ■ 25–50% ■ 50%+

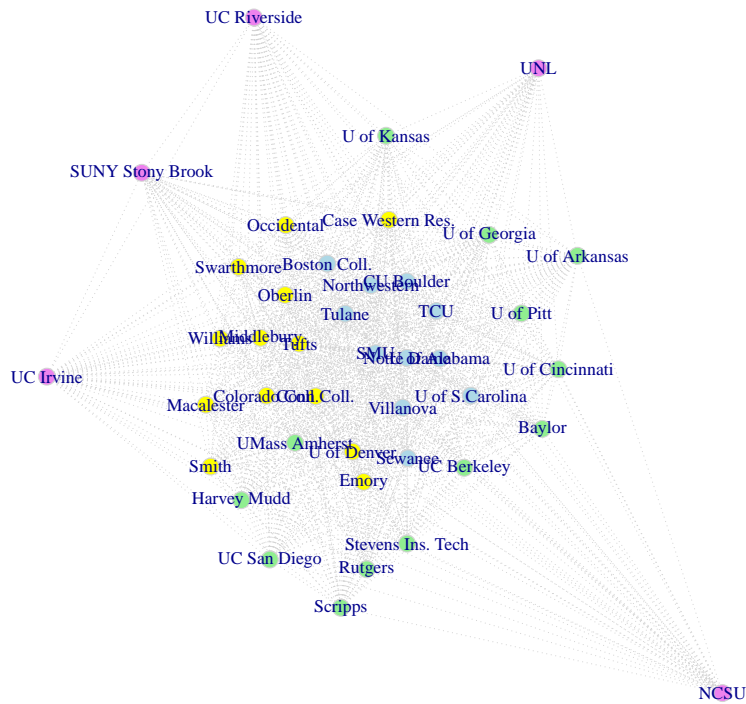**Ranking** ■ Top 200 A+ ■ Other A+ ■ A ■ Less than A

RQ3: Overlapping networks of visits to private high schools

1-mode network for public institutions, colored by cluster

1-mode network for all institutions, out-of-state visits only for public universities, colored by cluster

UC Riverside

UNL

U of Kansas

SUNY Stony Brook

Occidental Case Western Res. U of Georgia

U of Arkansas

Swarthmore Boston Coll. CU Boulder
Oberlin Northwestern
Tulane TCU U of Pitt

Williams Middlebury Tufts
SMU Notre Dame U of Alabama U of Cincinnati
UC Irvine Colorado Coll. Conn. Coll. U of S.Carolina
Macalester Villanova
Baylor

UMass Amherst
Smith U of Denver Sewanee UC Berkeley
Emory
Harvey Mudd

Stevens Ins. Tech
UC San Diego Rutgers

Scripps

NCSU

References

Borgatti, S. P. (2008). 2-mode concepts in social network analysis. In *Encyclopedia of complexity and system science.*

Campbell, A. (2017). Higher education marketing: How to master your admissions funnel. Retrieved from https://hop-online.com/blog/higher-education-marketing-admissions-process/

Clinedinst, M., & Koranteng, A.-M. (2017). *2017 state of college admission.* National Association of College Admissions Officers.

Cookson, P. W., & Persell, C. H. (1985). *Preparing for power : America's elite boarding schools* (pp. x, 260 p.). New York: Basic Books.

Cottom, T. M. (2017). *Lower ed: The troubling rise of for-profit colleges in the new economy* (pp. 228 pages). The New Press.

Holland, M. M. (2019). *Divergent paths to college: Race, class, and inequality in high schools.* Rutgers University Press. https://doi.org/10.36019/9780813590288

Jaquette, O., & Curs, B. R. (2015). Creating the out-of-state university: Do public universities increase nonresident freshman enrollment in response to declining state appropriations? *Research in Higher Education*, *56*(6), 535–565. https://doi.org/10.1007/s11162-015-9362-2

Khan, S. R. (2010). *Getting in: How elite schools play the college game* (pp. 97–113). Rowman & Littlefield.

Khan, S. R. (2011). *Privilege: The making of an adolescent elite at st. Paul's school* (pp. 232 pages). Princeton, N.J.: Princeton University Press.

McClure, K. R., Barringer, S. N., & Brown, J. T. (2019). Privatization as the new normal in higher education. In L. W. Perna (Ed.), *Higher education: Handbook of theory and research: Volume 35* (pp. 1–78). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-11743-6_13-1

McDonough, P. M. (1997). *Choosing colleges: How social class and schools structure opportunity* (pp. xi, 174 p.). Albany: State University of New York Press.

Noel-Levitz, R. (2020). *2020 cost of recruiting an undergraduate student report* (Report). Ruffalo Noel-Levitz. Retrieved from https://learn.ruffalonl.com/rs/395-EOG-977/images/2020_CostRecruiting_Report.pdf

Posecznick, A. (2017). *Selling hope and college merit, markets, and recruitment in an unranked school.* Cornell University Press. https://doi.org/10.7591/9781501708404

Ruffalo Noel-Levitz. (2018). *2018 marketing and student recruitment report of effective practices.* Ruffalo Noel-Levitz. Retrieved from http://learn.ruffalonl.com/rs/395-EOG-977/images/RNL_2018_Student_Recruitment_Marketing_Report_EM-19.pdf

Salazar, K., Jaquette, O., & Han, C. (forthcoming). Coming soon to a neighborhood near you? Off-campus recruiting by public research universities. *American Educational Research Journal.*

Stevens, M. L. (2007). *Creating a class: College admissions and the education of elites* (pp. 308 p.). Harvard University Press.