Recruiting Chapter

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1 Introduction

Prior to the pandemic, admissions counselors from colleges and universities traveled to local high schools each year in order to meet prospective students and maintain relationships with guidance counselors at feeder schools (Stevens, 2007). Salazar, Jaquette, & Han (online first) analyzed off-campus recruitiving visits made in 2017 by 15 public research universities. Surprisingly, 12 of the 15 universities made more visits to *out-of-state* high schools than *in-state* high schools. These out-of-state visits focused on public schools in affluent, predominantly white communities. Additionally, most public research universities in our sample made a disproportionate number of visits to out-of-state private high schools. For the University of California-Berkeley, for example, 155 (43%) of the 360 out-of-state high school visits were to private high schools. For the University of Colorado-Boulder, 321 (36%) of the 901 out-of-state high school visits were to private high schools.

Whereas Salazar et al. (online first) primarily analyzed visits to public high schools, this chapter focuses on visits to private high schools. More specifically, we investigate how visits to private high schools by public research universities compare to visits to private high schools by selective private universities.

1.1 Social mobility, social reproduction, and privatization

The sociologist Max Weber is credited for the insight that education has a "dual character," on one hand, serving *social mobility* by redistributing access to privileged positions and, on the other, serving *social reproduction* by granting privileged families disproportionate access to the educational institutions that confer pathways to privileged positions (Stevens, Armstrong, & Arum, 2008).

The mission of selective private colleges and universities is more squarely associated with social reproduction rather than social mobility. Historically, these institutions depend on patronage from philanthropic interests – in connection with business and religious interests – and depend from wealthy households who provide tuition revenue and donations (Stevens & Gebre-Medhin, 2016). In turn, selective private institutions contribute to social reproduction by providing access to their patrons. The "Chetty" data on parental income by college show that the overwhelming majority of students at selective private institutions have parental income in the top quintile (Burd, 2017; Chetty, Friedman, Saez, Turner, & Yagan, 2020). A significant caveat is that religiously affiliated universities may prioritize enrollment opportunities for students of the same faith regardless of wealth, but even here the mission is to benefit families from a particular cultural status group [CITE].

The traditional, albeit mythologized, public good mission of public research universities is tied to social mobility and development of the state (Haycock, Mary, & Engle, 2010; Kezar, Chambers, & Burkhardt, 2005). Public research universities are designated the unique responsibility of educating the future civic, professional, and business leaders of the state. Quoting 19th century University of Michigan President James Angell, these institutions contribute to social mobility by providing "an uncommon education for the common man" (as cited in Rudolph, 1962, p. 279) who could not afford tuition at elite private institutions.

We argue that the recruiting behavior of colleges and universities is an indicator of organizational enrollment priorities and, in turn, the extent to which enrollment priorities serve social

mobility or social reproduction. Recruiting visits to private high schools are consistent with the social reproduction mission of selective private universities, regardless of whether the university is targeting a particular high school because of its academic reputation, religious affiliation, or the affluence of its student body. By contrast, for public research universities, visits to private high schools – particularly out-of-state schools – are antithetical to mission of social mobility for high-achieving, low-income state residents.

Analyses of recruiting visits to private high schools can contribute novel insights about the "privatization" of public research universities. Within the scholarly literature on privatization, one strand of scholarship 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 (McClure, Barringer, & Brown, 2019@; Slaughter & Leslie, 1997). Of relevance to this chapter, public research 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. A second strand within the privatization literature conceptualizes privatization as a process whereby public institutions become more similar – in terms of characteristics or behavior – to for-profit or private non-profit organizations (McClure et al., 2019). A weakness of this literature is that few empirical studies analyze public institutions on a behavior associated with private institutions.

Therefore, this chapter compares public research universities to selective private universities on the dimension of recruiting visits to private high schools, a behavior associated with the social reproduction orientation of selective private universities. Our primary goal is to learn about public research universities, using the behavior of private universities as a benchmark to develop more thoughtful insights about public research universities. We analyze recruiting visits made in 2017 calendar year by a sample of 15 public research universities, 14 selective private universities, and 12 selective private liberal arts colleges.

Because little is known about recruiting at private high schools by public universities, we conduct descriptive analyses that seek to identify basic patterns and relationships. Because a recruiting visit to a private high school is an indicator of a relationship between two actors, we also utilize social network methods in order to compare the recruiting networks of public universities to those of private universities. Analyses are informed by the following 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 selective private universities?

2. How do the characteristics of private high schools visited by public research universities compare to the characteristics of private high schools visited by selective private universities?

3. To what extent do public research universities and selective private universities visit overlapping sets of private high schools?

SHORT PARAGRAPH GIVING OUTLINE OF CHAPTER

2   What do we know about off-campus recruiting visits

This section provides context for our analyses. 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. Second, we review empirical scholarship from sociology that considers off-campus recruiting, emphasizing scholarship that considers the relational aspects of recruiting visits and scholarship that considers private high schools.

2.1 Situating Off-Campus Recruiting Within Enrollment Management

The "enrollment funnel" – depicted in Figure 1 – is a conceptual heuristic that identifies stages in the student recruitment process (prospects, inquiries, applicants, accepted applicants, and enrolled students). "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. The enrollment management industry uses the enrollment funnel to inform marketing and recruiting interventions that target specific stages. Most scholarship on enrollment management focuses on the final stages of the enrollment funnel, specifically which applicants are admitted and the use of financial aid "leveraging" to convert admits to enrollees (e.g., Alon, 2009; Doyle, 2010; Karabel, 2005; Karen, 1990; McPherson & Schapiro, 1998; Posselt, 2016; Waddell & Singell, 2011). By contrast, the enrollment management industry expends substantial resources on marketing/recruiting activities that target earlier stages of the enrollment funnel (Noel-Levitz, 2020).

INSERT FIGURE 1 ABOUT HERE

Institutions identify undergraduate "prospects" by purchasing "student lists" – containing contact, demographic, and academic achievement information – from College Board, ACT, and other vendors. Universities control which prospects are contained within a list by filtering on criteria such as zip code, test scores, and high school GPA. Once prospects and inquiries are identified, they are targeted with remote and face-to-face recruiting interventions designed to solicit applications and deepen engagement. Remote recruiting interventions include postcards, brochures, emails, text messages, and targeted social media. Face-to-face recruiting interventions include on-campus visits by prospects and off-campus recruiting visits by admissions representatives to high schools, community colleges, college fairs, etc. Institutions utilize advertising (traditional and digital) and social media to solicit inquiries

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and to create positive "buzz" amongst prospects (Dupaul & Harris, 2012). Given the the rise in "stealth applicants" who do not inquire before applying (Dupaul & Harris, 2012), advertising and social media enables universities to tell their story to prospects who do not wish to be contacted.

What do we know about off-campus recruiting from previous research? As is true for most aspects of enrollment management, much of what we know about off-campus recruiting comes from consulting firms (e.g., Ruffalo-Noel Levitz, EAB), professional associations (e.g., NACAC), and from practitioner-oriented publications. 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. Off-campus visits were tied with student list purchases 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 1, reproduced from Noel-Levitz (2020), shows the percentage of undergraduate recruitment budget allocated to different marketing and recruiting activities.[1] The average public university spent 16% of its recruiting budget on off-campus recruiting visits, compared to 12% of its budget on purchasing student lists and 17% of its budget on "prospective student communications" (e.g., mail, email, text, social media) targeting prospects and inquiries. An emergent trend over the past decade – partially a response to public universities seeking nonresident students – has been the growth of "re-

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[1]Table drawn directly from Noel-Levitz (2020) Figure 9, which is based on a convenience sample of 45 four-year non-profit institutions and 21 four-year public institutions.

gional recruiters" who target specific metropolitan areas in the US and abroad (Whitney & Schmidt, 2015). These regional recruiters may be college/university employees or they may be independent contractors who live in the metropolitan area they recruit.

2.2 Empirical Scholarship from Sociology

Empirical academic scholarship on off-campus recruiting is mostly limited to a modest number of sociological case studies, which typically analyze off-campus recruiting as part of a broader analysis of enrollment management (e.g., Holland, 2019; Cottom, 2017; Khan, 2011; Posecznick, 2017; Stevens, 2007). Holland (2019) analyzes visits from the perspective of students at two racially and socioeconomically diverse public high schools. Holland (2019) found that high school visits – including college fairs, instant decision events, and small-group representative visits – influenced where students applied and where they enrolled. This finding was strongest for first-generation students and under-represented students of color, who often reported that "school counselors had low expectations for them and were too quick to suggest that they attend community college" (p. XXX) This trust vacuum created an opportunity for colleges because these students were drawn to colleges that connected with them and made them feel wanted. For example, Holland (2019) describes a high-achieving, first-generation, African American student who was admitted by a highly selective liberal arts college but chose to attend a less selective college that "seemed to want him more" (p. XXX). By contrast, affluent students with college educated parents were less taken by such overtures and more concerned with college prestige.

Stevens (2007), an ethnography of the admissions office at a selective private liberal arts college, highlights the relational function of off-campus recruiting 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." Therefore, during the autumn "travel season," admissions officers visit selected high schools across the country "to spread word of

the institution and maintain relationships with guidance counselors" (p. 53-54). 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. Whereas 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. From this perspective, recruiting visits may affect outcomes such as inquiries, applications, and matriculation through their affect on high school guidance counselors. The logic is that a guidance counselor who views a college favorably will steer students to the college.

Although not about recruiting visits per se, Khan (2010, 2011) is centrally important for our study because he lays out a conceptual explanation of why colleges and private high schools develop relationships with one another (i.e., what is each trying to obtain from the other). 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). The answer begins by considering the goals of colleges, which are represented by admissions officers, and the goals of private high schools, which are represented by guidance counselors. Colleges want high-achieving students who can pay tuition and donate. They want low acceptance and high yield rates, which are important for rankings. Colleges also want a class composed of "interesting characters" whose curricular and extracurricular strengths meet the needs of important campus constituents (e.g., academic majors, the athletic department, clubs, etc.). Elite private high schools want to send *all* students to the best college possible. Here, high school guidance counselors face "the pressure of making sure their school seems worth it – that ... paying some $40,000+, really does aid students in the college process" (Khan, 2010, p. 105).

The challenge faced by high school counselors at elite private schools is that "some of these

students are slightly better than others. These students will likely get into more than one school – but they can only attend one. And this will lower the chances of your 'second-best' students getting into top schools" (Khan, 2011, pp. 173–174). "Luckily," Khan (2010, p. 105) writes, "the problem for elite boarding schools matches up quite nicely with the problem faced by elite colleges." That is, although college admissions officers receive applications from many outstanding students,

> These outstanding students will also be outstanding to Princeton, Yale, Stanford, and everywhere else. How do you know the ones you pick will attend your school? You can't quite trust applicants, as they are all likely to tell you how much they want to go to your school. And if students you accept go somewhere else, there's not much you can do. But you can get better information – information you want – from their high school. And you can reward that school for good information and sanction it for bad information (Khan, 2011, p. 173).

This desire by colleges for trustworthy information about applicant intentions creates an opportunity for high school counselors to advocate on behalf of their students. This opportunity depends on guidance counselors having personal relationships with university admissions offices and on having small enough caseloads to advocate for each student individually.

To explain how high school counselors capitalize on this opportunity, Khan (2011) describes two hypothetical students – Susan and Billy – who both apply to Harvard and Yale. Susan is a shoo-in at both universities, but wants to attend Harvard. Billy has a weaker academic record than most Ivy League students, but has strong extracurricular activities. The guidance counselor tells Harvard that Susan wants to attend Harvard. Next, he informs Yale that Susan will choose Harvard, but Billy loves Yale and has great "character" and extracurricular activities. In the end, Harvard rejects Billy and accepts Susan, thereby, decreasing acceptance rate and increasing yield. Yale rejects Susan and accepts Billy, thereby, also decreasing acceptance rate and increasing yield.

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The horsetrading described by Khan (2011) depends on a relationship where the college can trust statements made by the high school counselor and vice-versa. This relationship is the product of repeated interactions over many years. A high school that makes false statements about applicant intentions faces consequences. The college "might stop taking these telephone calls and ignore the information provided. They may even start accepting fewer students from the school, thinking it is less than an honest" (Khan, 2010, p. 106). Because the college and the high school are mutually dependent, however, both "have an incentive to continue with a strong, honest relationship" (Khan, 2010, p. 106). Although, such horsetrading may be less pervasive now than it was in prior decades and may be less common at non-elite private schools. Additionally, college admissions officers from public universities likely have less authority to engage in these tacit negotiations because admissions criteria at public universities face greater public scrutiny than admissions criteria at private colleges and universities.

2.2.1 Visits as an indicator of a social relation

Stevens (2007) and Khan (2010, 2011) suggest that strong relationships are mutually important for the college and for the private high school. Strong relationships enable colleges and schools to negotiate and send trustworthy information to one another. Without a strong relationship, it unlikely that a college admissions counselor will "take the call" of a high school guidance counselor (Khan, 2010, 2011). Even in the absence of horsetrading described by Khan (2011), relationships enable the college admissions counselor and the high school guidance counselor to tell one another "their story" and relay that story to constituents (Stevens, 2007). The college admissions counselor explains why the college/university is a "special place" that high school students should want to attend (Stevens, 2007). The guidance counselor explains why the high school is a special place, that even students with lower grades have outstanding extracurricular strengths that will benefit the college (Khan, 2010).

The presence of a recruiting visit between a college and a private high school is an indicator that the college and the high school have a relationship. From an empirical perspective, Stevens (2007) finds that off-campus recruiting visits are important for the maintenance of strong relationships between a college and a high school. From a logical perspective, we argue that, 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).

Conceptualizing a recruiting visit as an indicator of a relationship between a college and a high school motivates the use of social network methods, which analyze the network defined by "network ties" (i.e., visits) between actors (colleges and high schools). Prior research has not used social network methods to analyze recruiting visits from colleges to high schools. Analyzing the network of recruiting visits to high schools enables us to investigate the extent to which public research universities are visiting similar sets of private high schools as private colleges and universities, and also the extent to which they are visiting the same private high schools. In turn, we hope these analyses yield novel insights to scholarship on the privatization of public higher education.

3   Social network analysis concepts

Having conceptualized a recruiting visit as an indicator of a social relation, this section introduces basic concepts from social network analysis and motivate the research questions that guide empirical analyses.

A social network consists of a set of actors – referred to as "vertices" – and the connections – referred to as "network ties" or "edges" between these actors. "One-mode" networks consist of vertices of a "type." For example, the social network of Facebook consists of users (vertices)

who are connected to one another via friendship ties (edges). Similarly, the social network of Twitter consists of handles (vertices) who are connected to one another by following or being followed.

Whereas "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. The most commonly analyzed two-mode network in social networks literature is a corporate board-director network (e.g., Davis, Yoo, & Baker, 2003). These networks consists of directors (mode 1) and organizational boards (mode 2) and a particular director shares an edge with a particular organizational board if they sit on that board. Similarly, our recruiting visit data form a two-mode network, consisting of private high schools (mode 1) and college (mode 2). An off-campus recruiting visit from a college/university to a private high school is the "edge" that connects two particular vertices. In this network, edges can only occur between vertices of a different type; that is a college can visit a high school, but colleges cannot visit other colleges and high schools cannot receive visits from other high schools.

To reduce complexity, two-mode network graphs are often analyzed as one-mode networks (Borgatti, 2008; Davis et al., 2003). Our two-mode college-school network can be transformed into a one-mode college network in which each vertex is a college/university and two colleges share an edge if both colleges visited at least one high school in common. The *weight* of an edge indicates the number of high schools that both colleges visited. For example, if there are 200 private high schools that received a visit from both Notre Dame and Villanova, the weight of the edge between Notre Dame and Villanova is 200.

3.1 RQ1: Degree centrality

In social network analysis, *centrality* refers to the importance or prominence or "being in the middle of things" of an actor/vertex in a social network [CITE]. Many alternative measures of centrality have been developed. All measures agree that centrality is an actor/vertex-level construct (e.g., each college in our network will have a centrality value, regardless of which centrality measure we use). However, different measures of centrality are based on different theoretical conceptualizations – for example, being directly connected to the most actors versus being the intermediary between otherwise disconnected actors – and are operationalized using different mathematical algorithms.

The simplest measure of centrality, *degree centrality* measures the number of edges directly connected to a vertex. For each college in our network, degree centrality is simply the number of different private high schools visited by the college. For each high school in our network, degree centrality is simply the number of colleges in our network that visited the high school. Social network theory conceptualizes degree centrality as a measure of "local" centrality, capturing the number of direct connections for each actor/vertex. For our empirical context, we conceive of degree centrality as a measure of scale of the number of private high schools a college visits and, equivalently, the number of private high schools we observe haging a social relation with each college. Given that we conceptualize visits to private high schools as a behavior consistent with the social reproduction orientation of selective private colleges/universities, we are interested in comparing how scale differs between public and private colleges/universities. This interest motivates research question 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 selective private universities?" We answer this research question by comparing degree centrality across universities.

Degree is a limited measure of centrality in that only identifies direct connections. By contrast, *k-path centrality* centrality measures the extent to which an actor/vertex is indirectly

connected to others, *betweenness centrality* measures the extent to which a vertex is an intermediary between otherwise disconnected groups of actors, and *eigenvector centrality* measures the extent to which a vertex is connected to highly connected others. Betweenness centrality tends to be relevant for empirical contexts (e.g., which manager gets credit for an idea) where an actor who occupies a position between groups can benefit by being a broker of information/ideas (Burt, 1992). By contrast, this chapter is more concerned with whether a particular college tends to have indirect connections with some colleges but not others, and what is the subset of high schools this group of colleges tends to visit. Research question 3, motivated below, explores these ideas.

3.2   RQ2: Ego networks and homophily

Because the data structure of networks is complicated, a useful first step is to analyze "ego networks" rather than the entire social network. An "ego" is a single "focal" node (e.g., The University of Notre Dame). An ego network consists "of a focal node ('ego') and the nodes to whom ego is directly connected to (these are called 'alters') plus the ties, if any, among the alters" (p. XXX). For example, the University of Notre Dame ego network consists of all private high schools that received at least one visit from Notre Dame. Additionally, for each high school visited by Notre Dame, the ego network may include all colleges/universities in our sample that also visited the high school. This chapter analyzes recruiting visits to private high schools by 41 colleges and universities, which we can think of as 41 ego networks.

A common finding in social networks research is that actors are more likely to form connections with actors who are are similar to them (McPherson, Smith-Lovin, & Cook, 2001). Said differently, ego networks are biased towards "homophily" rather than "heterophily." Homophily is the idea that two vertices are more likely to be connected if they have similar characteristics (e.g., two people are more likely to be friends on Facebook if they have similar political ideologies). Heterophily, the opposite of homophily, is when pairs of connected

vertices have different characteristics from one another.

In our analyses of recruiting visits from colleges to private high schools, we are interested in the existence of homophily versus heterophily for two reasons. First, prior scholarship suggests that private colleges and private high schools are more likely to have a relationship when they share common ideologies or view themselves as belonging to the same echelon (Khan, 2010, 2011; Stevens, 2007). Second, with respect to our substantive interest the behavior of public research universities, the characteristics of visited private high schools have consequences for subsequent enrollment composition of public research universities. Therefore, we are interested in whether universities tend to visit high schools that are similar to them on certain characteristics. Additionally, we are interested in whether public research universities favor high schools with certain characteristics, independent of homophily. These interests motivate research question 2, "How do the characteristics of private high schools visited by public research universities compare to the characteristics of private high schools visited by private universities?"

Decisions about which particular characteristics to analyze were driven by substantive considerations and data limitations. In particular, we analyzed geographic region, religious affiliation, academic reputation, racial composition, and enrollment size. We analyze geographic region because, for most colleges and universities, enrollment demand is likely to be stronger at high schools in the same geographic region, but nationally prestigious colleges and universities may experience high demand throughout the country. We analyze religious affiliation because private colleges are more likely to have a relationship with private high schools with a similar religious affiliation. Although public universities are formally secular, we are interested in whether particular public universities tend to target religiously affiliated private high schools. We analyze academic reputation based on the idea that more highly ranked colleges are likely to target highly ranked private high schools. Racial composition is of substantive interest because the racial composition of visited high schools has consequences for the rational composition of colleges and universities. Given our interests in

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social reproduction versus social mobility, we would also analyze tuition price and household income, but these data are not avalable for private high schools.

3.3 RQ3: Network similarity and community detection

This chapter conceptualizes recruiting visits to private high schools as a behavior consistent with the social reproduction orientation of selective private colleges and universities. We are interested in how similar the recruiting networks of public research universities are to those of private colleges and universities, thereby motivating research question 3: to what extent do public research universities and private universities visit overlapping sets of private high schools? This research question is addressed, simultaneously, through the use of network graphs and by allocating each college/university to a "community" cluster.

Network graphs show vertices as nodes and edges as lines connecting two nodes. Conceptually, we think of nodes as repelling one another and edges as pulling nodes together. Therefore, nodes that share few connections are located apart and nodes that share many connections are located close together. Nodes that are very "central" – many direct and indirect connections to other nodes in the network – are located near the center of the graph, while nodes that are relatively disconnected are located at the periphery of the graph. In the analyses below, we graph the one-mode college network, using relative proximity of nodes to convey whether a pair colleges have a similar network structure.

We also address research question 3 by using cluster analysis to identify colleges/universities that share common network structure. 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

4 Data and Methods

4.1 Data

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); and 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. Our final analysis sample consists of 15 public research universities, 14 private research universities, and 12 private liberal arts colleges.

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4.2 Methods

5 Results

5.1 Research question 1: scale of visits

Research question 1 asks, 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 selective private universities? This question can be answered by counting the number of visits to private high

schools, which equivalent to calculating degree centrality for each university. In addition to scale, we are also interested in the relative scale of visits to private high schools. That is, the number of visits to private high schools as a proportion of all off-campus recruiting visits, or as a proportion of all recruiting visits to high schools. Appendix Figures 4 and 5 show the number of visits by "type" (public high school, private high school, community college, other), respectively, for public research universities and selective private universities. Figures 2 and 3 show the number of visits to private high schools and public high schools, respectively, for public research universities and selective private universities, with separate bars for in-state and out-of-state visits.

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5.2 Research question 2: characteristics of visited schools

TEXT

5.3 Research question 3: overlapping network structure

TEXT

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sented at the 2015 National Association for College Admissions Counseling National Conference.

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

7   Appendix

Figure 1: The enrollment funnel

Leads/Prospects

Inquiries

Applicants

Stealth Applicants
(Did Not Identify)

Completed
Applications

Accepted

Enrolled

Matriculated

Figure 2: Number of visits to public and private high schools by public research universities
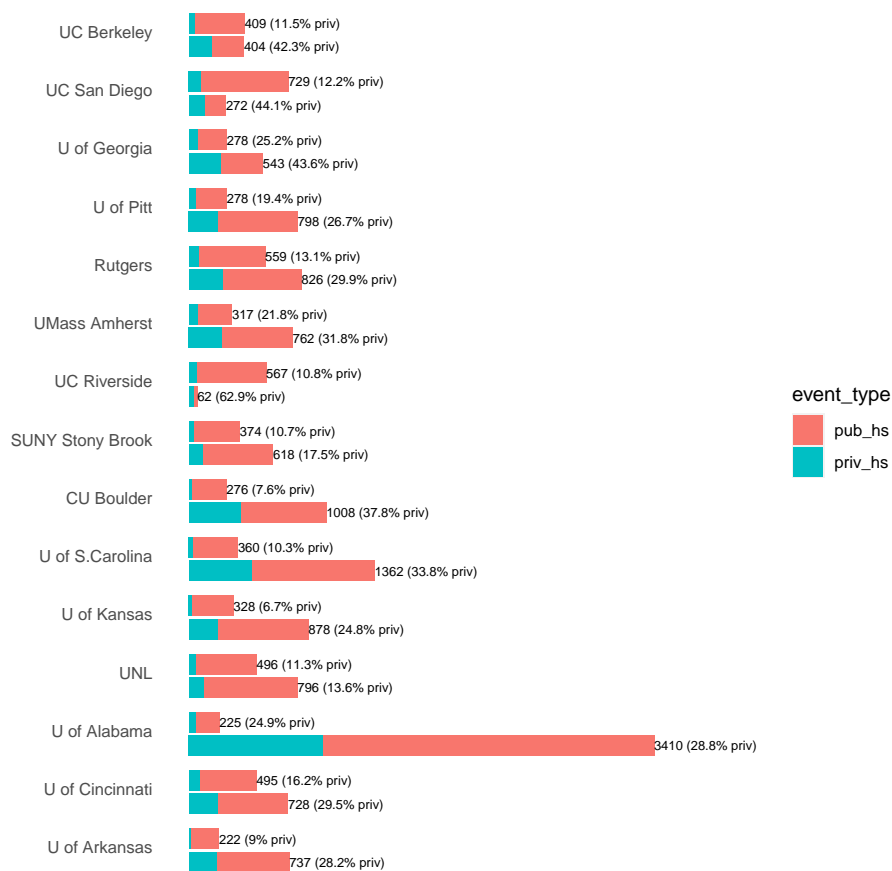
Figure 3: Number of visits to public and private high schools by selective private universities
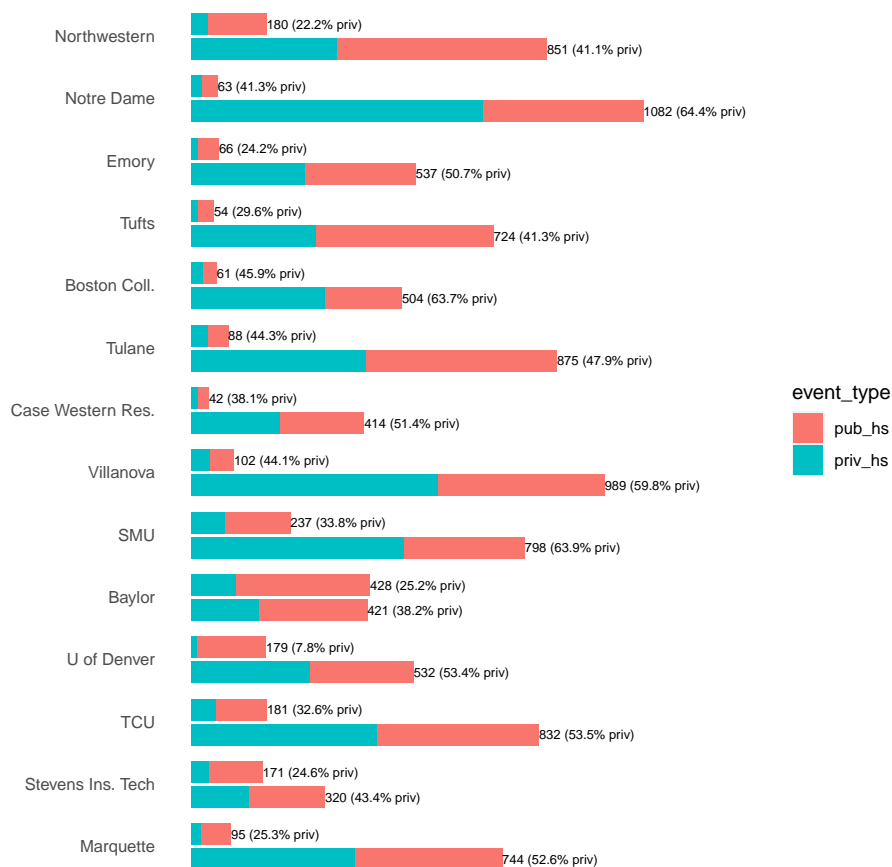
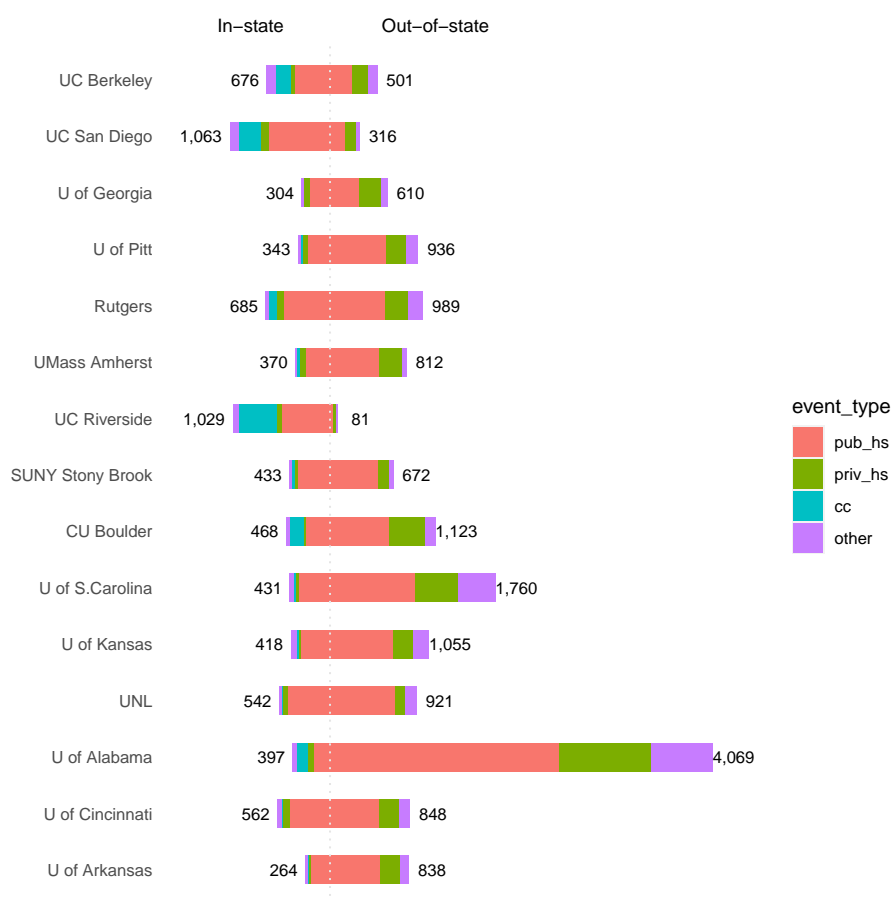Figure 4: Number of visits by type and in-state vs. out-of-state, public research universities

Figure 5: Number of visits by type and in-state vs. out-of-state, selective private universities