Closing the Doors of Opportunity: How Financial, Sociocultural, and Institutional Barriers Intersect to Inhibit Participation in College Internships

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Abstract

Internships are widely perceived as a "high-impact practice" that opens the doors of opportunity for college students, yet little is known about obstacles to participation. Instead, educators and employers too often view participation as unproblematic, with many postsecondary institutions beginning to mandate internships for graduation in many colleges and universities. This study reports findings from surveys (n = 1,549) and focus groups (n= 100) with students at five diverse postsecondary institutions that include a community college, a Historically Black College and University, and three comprehensive universities. Results indicate that 64% of students who did not take internships had in fact wanted to, but could not due to intersecting obstacles that include the need to work at a full- or part-time job, heavy course loads, and a lack of opportunities in their disciplines. First-generation students were more likely to report needing to work, Arts & Humanities students were more likely to report insufficient pay and heavy course loads, and full-time students were least likely to report insufficient pay. Given the financial, structural, and even spatial forces that inhibit the ability of many college students to pursue and then complete an internship, we argue that postsecondary institutions should not mandate or advocate for internships until and unless they address these obstacles to internship participation. Ultimately, colleges and universities must work to ensure that internships do not reproduce privilege and exacerbate inequality.

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Internships are widely perceived as influential co-curricular experiences that provide benefits to students, educators, and employers alike—a veritable "win-win-win" situation (Knemeyer & Murphy, 2002). This view of internships is based on the notion that they enable students to cultivate valuable professional experience and networks, provide educators with a venue for students to translate academic knowledge to real-world situations, and supply employers with a steady stream of new talent (National Association of Colleges & Employers, 2018). In fact, a growing body of evidence shows positive impacts of internships on students' academic success (Binder et al., 2015), career development (Taylor, 1988), and post-graduate wages and employment (Knouse et al., 1999), leading some to call internships an influential "door opener" for college graduates (Saniter & Siedler, 2014). As a result, internships have been labeled a "high-impact practice" that colleges and universities should promote as an important, if not essential, part of the college experience (Kuh, 2008).

These potentially transformative experiences may not be available to all students, however, particularly low-income and/or first-generation students who may lack the financial and/or social capital to identify and then complete an internship (Curiale, 2009; Finley & McNair, 2013; Perlin, 2012). Financial obstacles include the prevalence of unpaid internships, which are untenable for students without ample financial resources, and the considerable relocation and living expenses incurred for non-local interns (Ashley et al., 2015). While stories of extraordinary situations such as the unpaid United Nations intern living in a tent in the expensive city of Geneva (Foulkes, 2015) may suggest that these incidents are rare, concerns are growing that significant numbers of students are "working multiple part-time jobs, taking out additional loans, or even skipping meals" in order to add the all-important internship to their résumé (Curiale, 2009, p. 1536). Consequently, some worry that internships may represent yet another vehicle for reproducing privilege and power for well-connected and wealthy students (Boulton, 2015; Curiale, 2009; Perlin, 2012).

Yet few empirical studies have examined the nature and extent of barriers to internship participation college students face. Promising lines of inquiry have explored how financial (Barnett-Vanes et al., 2014; Shade & Jacobson, 2015), sociocultural (Boulton, 2015; Frenette, 2013), and institutional (Allen et al., 2013) factors can inhibit student participation in internships. In this paper we build upon these studies to examine the barriers to internships faced by students in five U.S. postsecondary institutions. In this mixed-methods study, we collected survey (n = 1,549) and focus group and interview (n= 100) data from students at three comprehensive universities, one historically black college and university (HBCU) and one technical college in the U.S. states of Maryland, South Carolina, and Wisconsin. These data were analyzed using chi-square, logistic regression, and inductive theme identification techniques to answer the following questions:

(1) What types of barriers keep students from participating in internships?
(2) How, if at all, do these barriers vary across different socioeconomic situations and student demographics?
(3) What are the mechanisms by which these barriers obstruct access to internships?

To interpret and explain our results, we draw on social and cultural capital theory (Bourdieu, 1977, 1986; Lin, 2001), which emphasizes how differential access to resources, networks, and knowledge facilitates and constrains access to opportunity, class mobility, and power. In this context, although we recognize that, in some cases, solutions may entail providing new or additional forms of capital to students, we argue against a deficit model of student capital (Solorzano & Yosso, 2001) and instead shift the focus to the roles that institutions, faculty, and employers can play to create the conditions where *all* students—regardless of race, class, or identity—have access to internships or similar experiential learning opportunities.

Background

The growing research literature on internships is interdisciplinary and global in nature, which is evident in studies that range from student satisfaction with hospitality internships in Taiwan (Ko, 2008) to analyses of student and supervisor views of the quality of criminal justice internships in the U.S. (Murphy et al., 2013). Within this diverse literature the focus tends to be on three outcomes internships may provide for students. First, scholars have examined how internships can enhance grades (Binder et al., 2015; Parker et al., 2016) as well as students' abilities to apply theoretical concepts to practice (Swift & Kent, 1999). Second, researchers have focused on students' development of their career goals and identities (Taylor, 1988), though the evidence is decidedly mixed on the ultimate impact of internships on students' career plans (Callanan & Benzing, 2004). Finally, researchers have focused on the impact of internships on post-graduate wages and employment, finding that internship completers in Germany have a 6% wage premium over non-completers (Saniter & Siedler, 2014) and that students with internships on their résumés receive 14% more call-backs from employers than non-interns (Nunley et al., 2016).

Given the mounting evidence that internships do have a positive impact on student employment outcomes, Saniter and Siedler (2014) argued that "student internship experiences can be regarded as a 'door opener' to the labor market" (p. 22), with the implication being that access to employment prospects and subsequent social mobility can be singularly impacted by participating in an internship. Supporting this contention is evidence that in fact, employers do perceive that an internship is a positive "signal" that indicates a student is not solely prepared in theoretical knowledge or ignorant of the professional world (Maelah et al., 2014; Nunley et al., 2016).

However, these conversations tend to unfold as if gaining access and entry to internships is unproblematic, a simple matter of accessing an institutional program like taking a course or joining a student organization. In practice, however, researchers and student affairs professionals have begun to question this assumption, whether based on ethical concerns about the legality of

asking students to pursue free labor (Curiale, 2009), the prevalence of racial discrimination in hiring decisions (Nunley et al., 2016), or barriers to participation for low-income and/or first-generation college students (Finley & McNair, 2013). In our review of the literature on barriers to internship participation, we found three different types of obstacles: financial, sociocultural, and institutional barriers.

To conceptualize how these different types of barriers may affect student access (or lack thereof) to internship opportunities, we draw on what Lin (2001) calls neo-capital theories of social mobility. Neo-capital theorists extend classical theories of capital that emphasize how capitalists use modes of production to generate profit and reproduce class privilege, and further argue that other types of capital (e.g., human, social, and cultural) can also provide returns in the market to confer power, privilege, and profit to individuals (Becker, 1962; Bourdieu 1986; Lin, 2001). Consequently, institutions such as universities, employers, or the state can act as "gate-keepers" that allow certain members of society to gain entry, while others are denied access due to their lack of financial, human, social, or cultural capital (Erickson, 1976).

Financial Barriers to Internship Participation

Research and debate about the financial barriers to internship participation has a long history, with much of the discussion focused on issues related to unpaid labor including their legality (Svacina, 2012), media coverage on the ethics of unpaid internships (e.g., Morris, 2018), or more conceptual arguments against the prevalence of un- or undercompensated internships (Perlin, 2012). However, while many scholars have examined the role of compensation in shaping internship outcomes (e.g., Crain, 2016; McHugh, 2017), surprisingly little empirical research exists on the nature and impacts of financial barriers to internship participation.

In a study on internships in the creative industry, Shade and Jacobson (2015) interviewed women who were unpaid interns in Toronto and New York City, finding that the students would have been unable to participate in an unpaid internship without parental financial support. This support ranged from paying room, board, and travel expenses to substantial in-kind support, and even with considerable financial support, most interns worked other jobs in addition to their unpaid internships to cover expenses. Additionally, students in this study reported that they knew peers who had to reject unpaid internship offers due to financial considerations.

Financial barriers can also be amplified by geography. Many internships, especially those in the creative and financial sectors, are often located in cosmopolitan centers such as New York City, which disadvantages students from outside the area. The stratospheric costs of living in such cosmopolitan centers of Europe and North America make relocating for an unpaid internship untenable for students without access to substantial additional resources. For instance, the Sutton Trust (2014) reported results from a 6-month post-graduation survey of higher education graduates in the United Kingdom (U.K.), finding that the high cost of living in London for rent, travel, and other living expenses is a major factor for students who opt to forgo an unpaid internship opportunity. For students in the U.S., international internships also involve

travel and relocation costs that may be a barrier for students lacking financial capital to cover these expenses and/or lost income (Barnett-Vanes et al., 2014).

These studies also highlight the fact that working students, who now represent a substantial number of U.S. college students (Perna, 2010), are simply unable to quit their current jobs in order to take an unpaid position or engaged in time consuming high-impact practices (Elling & Elling, 2000). The need for many students to work to support themselves and/or their families while attending college creates a considerable constraint on their ability to accept unpaid or poorly paid internships, or internships with extended duration or work hours per week (DiRienzo, 2016; Harvey & Reyes, 2015; Matsumoto, 2015; Taylor, 1988).

Sociocultural Barriers to Internship Participation

Another set of barriers to internship participation includes sociocultural factors such as social and professional networks. These networks are important because they represent channels through which information, resources, and social affirmation—also known as social capital—can flow and confer position and prestige for well-connected students (Lin, 2001). For example, Milburn (2009), documents how internships, "operate as part of an informal economy in which securing an internship all too often depends on who you know and not on what you know" (p. 99). Consequently, students whose parents or friends who are already enmeshed in professional cultures and networks will have an advantage over those who lack access to such communities. In this way, social networks can reproduce upper- and middle-class advantage while excluding low-income students from these opportunities, which can be seen as a form of class-based "opportunity hoarding" (Tilly, 1998). The influential role of social and professional contacts is common in creative industries (Frenette, 2013; Shade & Jacobson, 2015; Allen et al., 2013), advertising (Boulton, 2015), and in so called elite professions including finance, banking, and law, which have historically relied on informal social networks and connections to elite higher education institution alumni networks for recruitment and hiring (Ashley et al., 2015; Milburn, 2009).

Further, the role of social networks as a barrier to internship participation may be inimical for racially minoritized students. Parks-Yancy (2012) interviewed African American students who were juniors and seniors at an urban university in the U.S. Southwest, finding that students had limited knowledge about career opportunities and pathways. However, a few students reported being approached by faculty who provided them with career information, recommendations for internships, or referrals to social connections in industry, and these few select students were able to pursue these leads to access internships and expand their career ambitions. This study highlights two troubling features of the internship landscape—that some student groups may lack access to high-quality information about career opportunities, and that selective faculty-driven professional networks may be privileging certain students over others.

First-generation college students may also lack knowledge about the value of internships to their career development. For instance, O'Connor and Bodicoat (2017) compared orientations to internship participation at a traditional elite university and a teaching university in the U.K.

Middle class students were both knowledgeable and enthusiastic about the role of internships in their career development, whereas working class students were more likely to be critical of internships and viewed them—even high quality, well-paid internships—as an exploitative waste of time, using highly emotive language to describe internships such as "slave labour" and "exploitation" (p. 445). Another study (Bathmaker et al., 2013) found that middle-class students were more successful at obtaining internships than working-class peers, in part because working-class students tended to focus on academics over extra-curricular strategies, or what the authors describe as focusing on the "old rules of the game," where academic credentials and pursuits are prioritized over accessing social capital and developing professional networks (p. 736).

Sociocultural barriers to internships may also be evident in students' habituation to their class-positioning, which may lead to self-selecting out of internship opportunities. For instance, one study found that students select internships based on their financial constraints, choosing to forgo an internship or to participate in shorter, fewer, and geographically proximate internships that may be financially more viable but also low-quality or unrelated to their academic interests or career aspirations (Allen et al., 2013).

Institutional Barriers to Internship Participation

Finally, some research focuses on instructional and/or structural barriers to internship participation and the provision of career-related advising and services. For example, Allen and colleagues (2013) found that elite institutions in the U.K. provide extensive coaching on how to access desired internships, including interview coaching and résumé audits, whereas universities that serve working class students tend to lack such services. For these institutions with fewer programs and services related to internships, students may struggle to find out about and then successfully pursue internship opportunities (Webber, 2005).

In one of the few studies about institutional factors that may impede students' access to internships, Finley and McNair (2013) examined student experiences with "high-impact practices," finding that a lack of advising and time to commit to programs such as internships impeded student participation. Students' lack of time to participate in internships (on account of work and other responsibilities) can be exacerbated by institutional factors such as heavy course loads and other scheduling problems—which is an issue that has been reported for out-of-class and work-based learning opportunities (McKinney et al., 2004).

Documenting the Intersecting Obstacles to Student Opportunity to Inform Change

These studies all point to the fact that access to internships is not unproblematic, and may be especially limiting for certain groups of students who lack sufficient funds to support their participation in unpaid or non-local labor, have limited social and professional contacts, or attend institutions without effective internship supports and programming. Thus, those students who have or can access certain forms of financial, social, and cultural capital may be the best positioned to gain entry to these increasingly valuable experiences (Lin, 2001). However, an individual's access to these various forms of capital is not random or solely due to hard work or "merit," but is shaped by a host of intersecting structural forces such as race, class, gender, and

age, which are themselves situated in unique and local historical and political contexts (Crenshaw, 1991; Núñez, 2014).

Furthermore, in considering how to increase access to internships and similar forms of experiential learning that confer so many advantages to students, focusing on which forms of capital students *lack* is not the only approach available to researchers and postsecondary professionals (Solorzano & Yosso, 2001). Instead, we argue it is desirable to first document patterns of (in)accessibility to internships and then to consider how postsecondary institutions, faculty, and employers can create the conditions in which *all* students have access to internships and related "door-opening" experiences.

Methods

This study employs a concurrent mixed-methods design, where both qualitative and quantitative data are collected and analyzed simultaneously to answer the research questions (Creswell, 2014). The survey and focus group results provide complementary forms of evidence, and we draw on qualitative and quantitative data to address the first two research questions on the nature of barriers to internships and how they vary by student characteristics, but rely exclusively on qualitative data to draw conclusions regarding the final issue of causal mechanisms shaping student access.

Sampling Strategies and Data Collection Procedures

Five postsecondary institutions reflecting different geographic locations, student body characteristics, and institutional missions were selected for this study: (a) a private HBCU in South Carolina (approximately 2,000 undergraduates), (b) a technical college in Wisconsin (18,000 students), (c) a comprehensive university in Central Wisconsin (13,000 undergraduates), (d) a comprehensive university in Southern Wisconsin (4,000 undergraduates), and (e) a comprehensive university in Maryland (2,500 undergraduates). The sampling frame included students in their second half of their degree programs to increase the prospects that a student had completed an internship. Based on resource constraints, the size of the study sample was capped at each institution at 1,250 students using random stratified sampling method based on two strata — students' gender and race. The only exception was the private HBCU, which only had 885 juniors and seniors so we used the entire population for our sample. To focus on students' experiences in internships and not on related experiential learning programs, we also excluded from the sampling frame students from programs with a required clinical practicum (e.g., teacher education, nursing and related allied health fields) or an apprenticeship program (e.g., skilled trades).

Following procedures for increasing response rates in survey research (Dykema et al., , 2013), we then sent a letter containing a cash incentive, following up with non-responders with email reminders and another cash incentive for all survey completers that was sent via a hard-copy letter. Two-hundred twenty-eight students responded from the university in Maryland (18% response rate), 198 from the HBCU in South Carolina (23% response rate), 386 from the

technical college in Wisconsin (31% response rate), 516 from the Southern Wisconsin university (41% response rate), and 221 from the Central Wisconsin university (18% response rate). Differences in response rates may be attributed to the use of a professional survey firm for the Southern Wisconsin university, though identical recruitment and data collection procedures were followed at all institutions. The survey was completed by a total of 1,548 students across the five institutions with an average response rate of 26%. An analysis of possible non-response bias showed that our study samples are representative of the study population based on race and gender at each of the five institutions.

After completing the survey, the students were asked if they were willing to participate in a focus group. Students who had taken an internship (n=52) *and* those who had not (n=48) were included in the study given the focus on understanding barriers to internship participation. Most of the 56 focus groups included two to four students, though no-shows resulted in one-person interviews in some cases. A group of two or three researchers traveled to the institutions to conduct those focus groups and interviews in person. Table 1 shows the characteristics of the participating students for the survey and the focus groups.

Table 1

Study sample: sociocultural, institutional and financial characteristics of students by institution

	Survey Total	MD	SC HBCU	WI Technical College	Southern WI PWI	Central WI PWI	Focus Groups
Observations	N = 676	N = 106	N = 90	N = 155	N = 255	N = 70	N = 100
			Sociocultural				
Age in years, mean (SD)	26.11 (7.88)	29.91 (8.79)	23.42 (5.49)	29.66 (10.47)	24.73 (5.91)	22.73 (3.58)	27.47 (8.50)
Gender (%)							
Male	246 (36.39)	42 (40)	17 (18.89)	82 (53.25)	92 (36.36)	31 (44.93)	36
Female	407 (60.21)	63 (60)	73 (81.11)	72 (46.75)	161 (63.64)	38 (55.07)	63
Race (%)							
Asian or Asian-American	56 (8.28)	9 (9.18)	0 (0)	18 (11.92)	23 (9.43)	6 (9.23)	6
Black or African-American	166 (24.56)	50 (51.02)	89 (100)	11 (7.28)	15 (6.15)	1 (1.54)	34
Hispanic or Latino	59 (8.73)	9 (9.18)	0 (0)	8 (5.3)	37 (15.16)	5 (7.69)	4
White or Caucasian	366 (54.14)	30 (30.61)	0 (0)	114 (75.5)	169 (69.26)	53 (81.54)	53
First-generation status (%)							
First-generation students	272 (40.24)	51 (48.11)	34 (37.78)	44 (28.39)	115 (45.1)	28 (40)	39
Continuing-generation students	404 (59.76)	55 (51.89)	56 (62.22)	111 (71.61)	140 (54.9)	42 (60)	61
			Institutional				
Academic enrollment (%)							
Full-time enrollment	525 (77.66)	62 (58.49)	90 (100)	88 (56.77)	220 (86.27)	65 (92.86)	79
Part-time enrollment	151 (22.34)	44 (41.51)	0 (0)	67 (43.23)	35 (13.73)	5 (7.14)	21
Self-report GPA[a] (1-8), mean (SD)	5.75 (1.81)	5.84 (1.80)	5.36 (1.77)	6.24 (1.88)	5.68 (1.86)	5.32 (1.67)	6.22 (1.78)
Internship requirement (%)							
Required	187 (33.94)	43 (48.86)	26 (37.14)	62 (46.62)	26 (13)	30 (50)	38
Not required	364 (66.06)	45 (51.14)	44 (62.86)	71 (53.38)	174 (87)	30 (50)	55
Major disciplines (%)							
Arts & Humanities	76 (11.24)	3 (2.86)	7 (7.87)	23 (15.03)	31 (12.2)	12 (17.14)	10
Biological Sciences, Agriculture, & Natural Resources	71 (10.50)	2 (1.9)	15 (16.85)	1 (0.65)	41 (16.14)	12 (17.14)	13
Business	189 (27.96)	46 (43.81)	12 (13.48)	42 (27.45)	72 (28.35)	17 (24.29)	26
Communication, Media, & Public Relations	29 (4.29)	3 (2.86)	3 (3.37)	4 (2.61)	13 (5.12)	6 (8.57)	8
Engineering	55 (8.14)	0 (0)	4 (4.49)	46 (30.07)	3 (1.18)	2 (2.86)	6
Health Professions	25 (3.70)	9 (8.57)	0 (0)	4 (2.61)	7 (2.76)	5 (7.14)	6

Physical Sciences, Mathematics, & Computer Science	54 (7.99)	12 (11.43)	1 (1.12)	9 (5.88)	28 (11.02)	4 (5.71)	7
Social Sciences	88 (13.02)	10 (9.52)	34 (38.2)	0 (0)	37 (14.57)	7 (10)	16
Social Service Professions	84 (12.43)	20 (19.05)	13 (14.61)	24 (15.69)	22 (8.66)	5 (7.14)	6
Financial							
Employment status (%)							
Full-time employed	109 (16.12)	41 (41.41)	8 (8.89)	30 (19.35)	25 (9.84)	5 (7.35)	6
Part-time employed	381 (56.36)	34 (34.34)	38 (42.22)	85 (54.84)	174 (68.5)	50 (73.53)	58
No employment	176 (26.04)	24 (24.24)	44 (48.89)	40 (25.81)	55 (21.65)	13 (19.12)	34
Parental income (%)							
Less than $24,999	128 (19.66)	19 (20.43)	35 (39.77)	29 (19.46)	40 (15.94)	5 (7.14)	18
$25,000–$49,999	147 (22.58)	24 (25.81)	28 (31.82)	37 (24.83)	53 (21.12)	5 (7.14)	20
$50,000–$74,999	133 (20.43)	23 (24.73)	13 (14.77)	27 (18.12)	50 (19.92)	20 (28.57)	17
$75,000–$99,999	88 (13.52)	11 (11.83)	4 (4.55)	15 (10.07)	38 (15.14)	20 (28.57)	16
$100,000–$124,999	65 (9.98)	6 (6.45)	4 (4.55)	14 (9.4)	34 (13.55)	7 (10)	5
$125,000–$149,999	48 (7.37)	7 (7.53)	3 (3.41)	13 (8.72)	18 (7.17)	7 (10)	6
$150,000 or more	42 (6.45)	3 (3.23)	1 (1.14)	14 (9.4)	18 (7.17)	6 (8.57)	9
Personal income, median (IQR[b])	10,000 (30,000)	20,000 (30,000)	1,750 (5,000)	14,000 (19,000)	9850 (11700)	8,000 (9,075)	10,000 (12,000)

Notes: Students who reported their gender as transgender (n=2) were removed from the analysis due to the small sample size. American Indian or Alaska Native (n=6), Native Hawaiian or Pacific Islander (n=1), two or more races/ethnicities (n=8) were removed from the analysis due to the small sample size. Nine major fields categories here are based on the National Survey of Student Engagement (2018).

[a]GPA stands for grade-point average. It is self-report GPA in this study through one question: Thinking about the past 2017-18 academic year, which of the following best describes your grade point average? (A = 8, A- = 7, B+ = 6, B = 5, B- = 4, C+ = 3, C = 2, C- = 1). Participants who reported a GPA below C- were exclude due to the low frequency.

[b]IQR stands for interquartile range, which is a measure of statistical dispersion and equal to the difference between upper and lower quartiles (IQR = Q3 - Q1). *p < .05, *p < .01, ***p < .001.

Research Instruments

Survey. All survey respondents were asked whether they had participated in an internship in the previous 12 months, with the following definition of internships provided:

> An internship is a position held within an established company or organization while completing a college degree, certificate, or diploma program. It involves working at the company or organization and performing tasks similar in nature and skill-level to tasks done by entry-level employees in the organization.

This definition was derived from examples of existing definitions and field-tested with a group of career advisors and experiential learning professionals.

Among the 1,548 students who completed the survey, 488 (32%) reported that they had participated in an internship during the past 12 months, and 1,060 (69%) reported not having had an internship. The 1,060 respondents who answered "no" to were then asked if they had been interested in pursuing one. For students who reported an interest in pursuing internships but did not take one, a follow-up item posed six potential obstacles to their applying for or accepting an internship: (a) course load at school was too heavy; (b) insufficient pay offered; (c) needed to work at current job; (d) lack of transportation; (e) lack of child care; and (f) lack of internship opportunities in their field.

Next, we mapped the three primary categories of obstacles identified in the literature review (i.e., financial, sociocultural, and institutional) to variables in our survey. For the financial obstacles, we elicited information about students' employment status, parental income, and personal annual income. Students who reported having a job and working 40 hours or more were considered as full-time employed; having a job and working below 40 hours were categorized as part-time employed; and those who reported not having a paid job were categorized in the no employment group. For the sociocultural category, we collected information about age, gender, race, and first-generation status. Finally, for the institutional factors, we focused on enrollment status, grade-point average (GPA), whether an internship was required to graduate from their academic program, and their major programs based on the National Survey of Student Engagement (2018) categories.

Focus group protocol. Focus group sessions lasted approximately 1 hour and were moderated by one or two researchers who used a semi-structured protocol that included questions about students' background, academic programs, and career goals. For students who had taken internships, questions were then asked about their motivations for pursuing internships, the nature of their work in the internships, the type of mentoring they received, and a question about obstacles to internship success: "Were there any issues, events, situations, or struggles that you would consider an obstacle to having a successful internship?" Students without internship experience were asked about general perceptions about internships and their future careers, and a question focused on obstacles: "What were or are some specific obstacles to

your pursuing an internship opportunity?" Answers to the questions about obstacles and/or struggles provided the bulk of the data for qualitative analyses.

Analytic Strategies

Survey data. Survey data were analyzed using R statistical analysis software (R Core Team, 2018). Missing data for binary variables was replaced by the value of "No," missing nominal data was replaced with "others, please specify" or "decline to answer," and missing ordinal or continuous data was were imputed by multiple imputation using "multivariate imputation by chained equations (MICE)" function in R (Buuren & Groothuis-Oudshoorn, 2011). In this paper we first present descriptive statistics to report frequencies for how students reported different barriers to internship participation and the degree to which they co-occurred with one another. Then we conducted a series of chi-square test of independence, independent T-tests, and multivariate logistic regression analyses to address the question regarding the degree to which sociocultural, academic, and financial factors are associated with barriers to internship participation. Students who reported (or not) specific barriers were compared using the independent t-test for continuous variables (e.g., age, GPA, parental income, personal income) and the chi-square test of independence was used for categorical variables (e.g., race, gender, first-generation status, internship requirement, enrollment status, academic disciplines, employment status). Then, variables that were significantly associated with each obstacle (e.g., needed to work) by a predetermined p value of .05 or less were selected and used as predictors to derive six multivariate logistic regression models using stepwise backward selection, with each obstacle being treated as binary dependent variable for each model respectively. Our main objective was to estimate the predicted probability for reporting an obstacle for the group of interest in comparison to the reference group. We interpret the logistic regression results through converting estimated coefficient (β) into odd ratios by exponentiating coefficient, exp(β). The result of Pearson's correlation indicated a low risk of multicollinearity that the input continuous variables (i.e., age, GPA, personal income) were not highly correlated with one another, with coefficients ranging from .01 to .13, meaning student characteristics likely correlate to internship experiences and barriers.

Focus group and interview data. The qualitative analysis of focus group transcripts proceeded through the following multistep process, using MaxQDA software (VERBI Software, 2017). The first step in the analysis was to segment the transcripts into more manageable units based on the topics of the semi-structured protocol. Two researchers independently segmented three randomly selected transcripts and then met to compare coding results and reconcile any disagreements. The two researchers then segmented the entire corpus of data independently. Next, the pair of researchers engaged in a round of inductive, open coding of approximately half of the transcripts, noting recurrent phrases, ideas, and observations related to obstacles inhibiting participation in an internship (Corbin & Strauss, 2014; Ryan & Bernard, 2003).

Throughout this open coding process, the researchers compiled analytical memos with themes related to barriers to internship participation. Based on themes derived from the analytical memos, the analysts generated a codebook that was reviewed and discussed by the

entire research team. Then, the pair of researchers each applied this codebook to three transcripts and found 88% agreement in their application of the codebook across the data. This process of establishing interrater reliability also included refining definitions of individual codes and rules for applying them to the text. The researchers then worked independently to apply the codes to the entire corpus (Campbell et al., 2013). Throughout this process, researchers continued to build analytical memos to integrate the data into emerging research findings, and the emerging analysis and data was presented and discussed at research team meetings to help develop interpretations and to confirm or dispute emergent findings.

Results

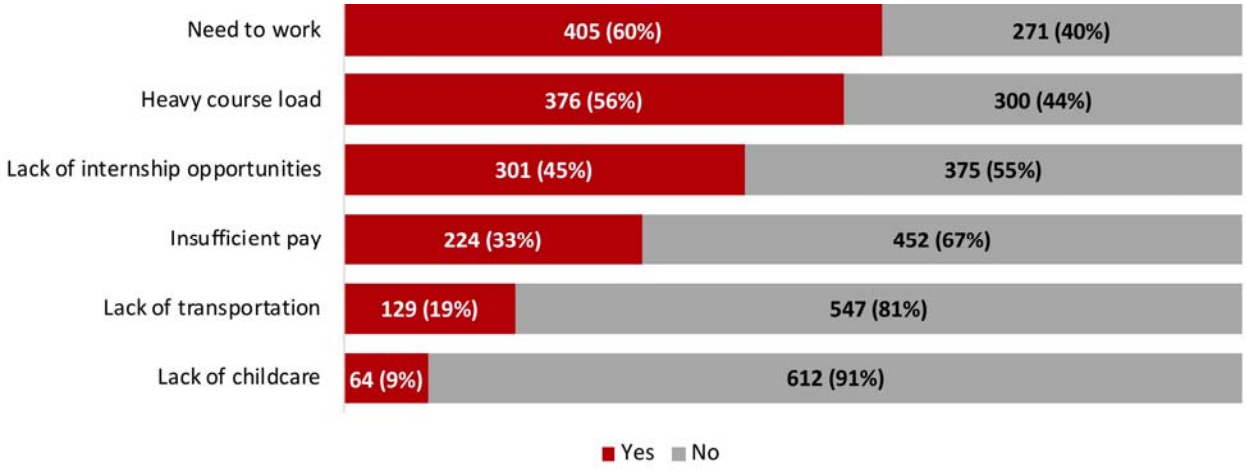
In this section we report results from analyses of qualitative and quantitative data to address the nature of barriers to internship participation (RQ1) and how these barriers vary by student characteristics (RQ2). For the third and final question pertaining to the mechanisms by which these barriers limit students in practice (RQ3), we report only findings from analyses of qualitative data which shed light on this phenomenon.

RQ1: What types of barriers keep students from participating in internships?

Survey data. For the 1,060 students who answered "no" to having participated in an internship in the past 12 months, 64% (n = 676) of them stated that they had hoped to obtain an internship but could not for a variety of reasons. This finding alone indicates a substantive number of college students want to pursue internships but cannot, thereby underscoring the fact that access to internships themselves is a considerable problem.

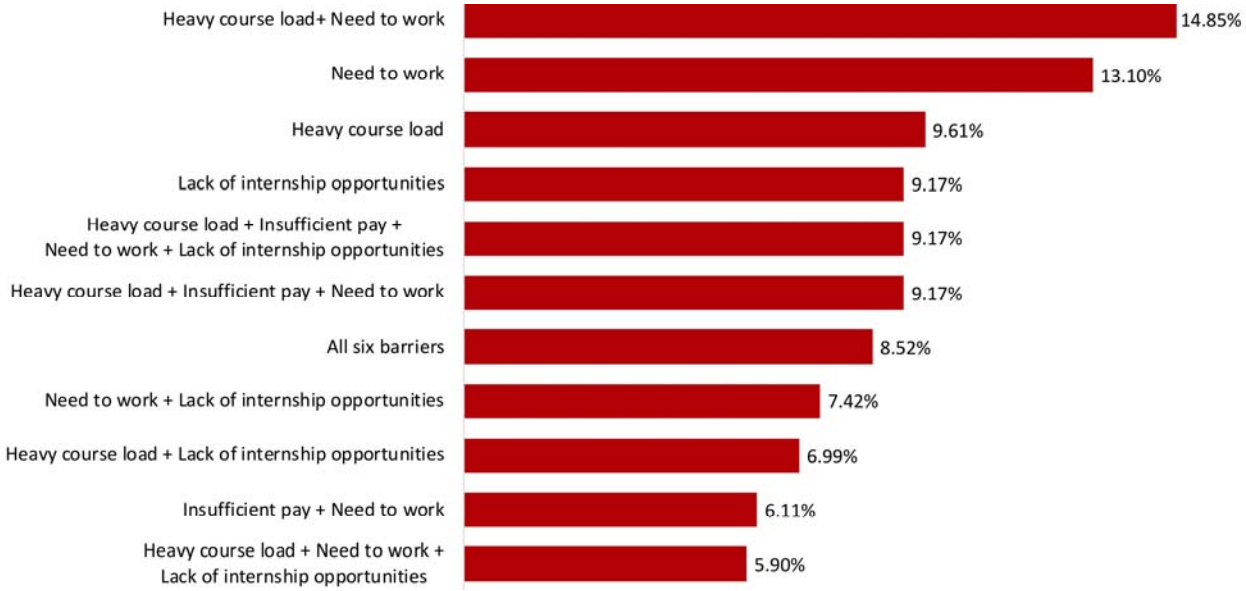
Among the six barriers to internships included in the survey (Figure 1), the most common reason that prevented students from taking an internship was the need to work at their current paid job (60%), followed by a heavy course load (56%), a lack of internships in their discipline or field (45%), insufficient pay (33%), lack of transportation (19%), and lack of child care (9%).

Figure 1. Student barriers to internships



Next, given the prospect that some students may experience more than one of these barriers at a given time, we report how individuals reported combinations of these barriers. The most common combination was the need to work at their current paid job and a heavy course load (n=68 students), followed by those who had a heavy course load, needed to work, and had too few internship opportunities (n=42), and those who reported the above three barriers but also the obstacle of finding internships with sufficient pay (n=42). At the same time, some students did report only a single obstacle, such as the need to work (n=60) or a heavy course load (n=44).

Figure 2. Combinations of barriers to internships, for 676 students



These findings indicate that barriers to internship participation tend to co-occur, such that it is more accurate to discuss barriers in the aggregate as intersecting forces, rather than as single obstacles that prevent access to an internship. What is notable in these data is not only the fact that multiple obstacles overlap or co-occur in the lives of individual students, but also that the need to work and a heavy course load are present in the four most frequently reported sets of barriers to internship participation. In other words, scheduling problems are pervasive and influential for this sample of working students.

Focus group data. Next, we turn to the focus group data, which includes insights from students who have and have not participated in an internship. The analysis revealed that both groups of students described obstacles, struggles, and concerns related to internship participation, both imagined and experienced, including issues with compensation, scheduling, availability, and geographic location.

Internship compensation. The most frequently discussed barrier to internship participation pertained to compensation—specifically, unpaid or inadequately paid internships. Some students had avoided pursuing or applying for internships because they believed them to be mostly unpaid, or because they could not find any that paid enough for them to consider leaving other

employment. As one working student explained about the low-paying internships he found online, "They were paid, but I mean, it's not like my salary, so you know, that's just not feasible." Another student explained why she had not taken an internship:

> My biggest struggle is most of them are unpaid. I am 26, getting married in a year … trying to do adult things and not getting paid for several months is just not something I can afford to do right now. I'm currently working a sad minimum wage job but it's at an animal shelter. But I wouldn't be able to do classes, do the internship, and work to make money. Which is kind of important because I'm basically just paying for school as I can, and I've got bills, phone, paying rent, and I have a wedding to save for [laughs]. Money is unfortunately an important motivator in what I'm looking for in an internship, and very few are paid.

While this student from a comprehensive university in Wisconsin found some internships with stipends, she explained that they were not large enough to pay more than the gas it would take to get to and from the internship site. Students such as this—who have bills, rent, and expenses like a wedding—sometimes organize their thinking into such lists of financial responsibilities, to which they viewed the addition of an unpaid or inadequately paid internship to be simply untenable. These students also expressed concerns that participating in an unpaid internship would require them forgo paid work needed to pay for college, and thus would require additional student loans or postponed loan payments, which were undesirable.

Internship scheduling. Another obstacle to internship participation voiced by focus group participants involved balancing the demands of their paid employment, coursework, study time, and family obligations with the hours needed for an internship. As one student described, "[I] pretty much do not have enough time to give to an internship even if it's just part-time. … I just don't think there's enough time in the day." This problem of scheduling isn't solely about time constraints related to work and school, however, but also implicates financial considerations. A student at the technical college explained how financial and institutional obligations were interconnected:

> Next semester I'm going to have to be juggling internship and classes. My program specifically says you shouldn't do (an internship) if you still have a certain amount of credits to go, so you don't overwork and overload yourself with so much left to do if you work an internship 16 hours a week as well. A lot of people are still going to be working their normal jobs too.

In addition, students in demanding academic programs such as business or science, technology, engineering, and mathematics programs emphasize the extra time needed to complete coursework, which they felt was incompatible with the time demands of an internship.

Another issue related to scheduling was discussed by a student as the "tension" that such "back-to-back-to-back scheduling," which caused problems with her supervisor at a tanning salon. Several students who worked full-time expressed a similar concern that adding an internship to their schedule could put their regular jobs at risk. For example, one student who had been promoted to the manager of a restaurant felt that she could not risk losing what she felt was

a stable job in order to schedule an internship. These findings indicate that internships may not only be an inconvenience for students with work obligations, but that they may in fact threaten their job security and/or career development.

Internship availability. Participants in our focus groups also expressed concerns about the limited availability of internships in their disciplines or chosen profession. One student in a physics and applied math program explained that he had not taken an internship simply because, "There aren't any here offered for me in my field." In contrast, a business student explained, "there's just a lot of opportunities in the business program, (so) it's easy for us to get multiple internships." These observations highlight the fact that some students may find ample opportunities in their fields, while others may be on career paths where internships are less common and/or not traditionally offered.

In addition, students had concerns about the relevance of tasks in some internships to their career development and professional goals. As one student explained: "So, I just want to find something other than sitting at the reception desk saying 'Hi,' checking them in, because that's—I mean if that's what I have to do, that's what I have to do—but I have the drive and desire to offer more." The potentially irrelevant nature of internship work was a major concern for students, especially those who have not yet had an internship. For example, students were concerned that given their lack of experience, supervisors may be unable or unwilling to train them, and they might be assigned low-quality work, "They might think of you as just like a coffee person or a go-do-this, go-get-that [person]."

Internship location. Finally, another barrier to internship participation was that of geography and location, which could lead to students incufrring travel, relocation and living costs for internships in expensive cities where many desirable internships are located. While some study participants who had had in internships were able to access additional resources from their families, such as free room and board from relatives living in cities like Atlanta or New York City, others only considered internships that were close to home where these expenses would not be an issue. For example, one student at a Wisconsin university decided to decline a highly desirable summer internship placement in the mining industry because it would have entailed substantial relocation and living expenses, while providing no compensation. Consequently, this student accepted another position on campus, and had to forgo his "dream internship." In other cases, geography became a problem because few internships were offered in a student's area of residence. As one student observed,

> [I]f I just put in psychology and internships and whatever else [into the online internship search tool], stuff will come up but nothing in [my city]. Until I put in a location—then boop!—everything went down from 100 to zero.

This observation highlights the dual nature of geographic obstacles to internships, where internships in particular disciplines *and* in particular cities may simply not exist.

RQ2: How, if at all, do these barriers vary across different socioeconomic situations and student demographics?

Next, we turn to an examination of how these various obstacles to internship participation varied across different student characteristics. To answer this research question, we used a combination of chi-square, t-test, logistic regression, and inductive theme analytic techniques.

Chi-square analysis and independent t-test results. First, we conducted analyses of potential differences in the ways that students reported the six barriers to internship participation according to students' financial (i.e., parental income, personal income, employment status), sociocultural (i.e., first-generation status, race, age), and academic or institutional factors (i.e., enrollment status, internship requirement, major disciplines, and GPA).

Financial factors and barriers to internship participation. Chi-square results showed that the students with different employment status significantly differed in reporting four barriers: a need to work at current jobs χ^2 (2, 666) = 138.48, $p < .001$; heavy course load χ^2 (2, 666) = 11.02, $p = .004$; insufficient pay offered by internship χ^2 (2, 666) = 15.54, $p < .001$; and a lack of transportation χ^2 (2, 666) = 24.23, $p < .001$. Specifically, students working full time most frequently reported the barrier of insufficient pay offered by internships (n=47, 43%) and the barrier of working at current jobs (n=93, 85%). Students without employment most frequently reported the obstacle of having a heavy course load (n=104, 59%) and transportation problems (n=55, 31%).

In addition, independent t-tests indicated that there was a significant effect for parental income on students' needs to work at their current job as a barrier to internship participation, $t(532) = -2.02$, $p = .04$, with students with such needs reporting higher parental income (3.31 versus 3.02). There was also a significant effect for parental income on students' reporting transportation as an obstacle, $t(190) = 2.65$, $p = .009$, with students without transportation barrier reporting higher parental income (3.28 versus 2.82). Finally, personal income had a significant effect on the obstacle of needing to work at students' current job, $t(570) = -5.93$, $p < .001$, with working students reporting higher income ($17,227.80 versus $9,962.57). Personal income also was significantly related to students' reporting insufficient pay as a barrier to participating in internships, $t(428) = -3.73$, $p < .001$. Students who reported insufficient pay had higher personal income compared with those who didn't report insufficient pay as a concern ($17.591.61 versus $12,709.35). In addition, personal income varied significantly between students with and without transportation barriers, $t(220) = 5.10$, $p < .001$, with students without transportation barrier reporting higher income ($15,634.70 versus $8,724.90).

Sociocultural factors and barriers to internship participation. Next, we examined how a group of demographic variables that we call here "sociocultural" factors are associated with specific barriers to internship participation. First, the need to work at a current job was reported differently by first- and continuing-generation students, χ^2 (1, 676) = 5.05, $\varphi = .09$, $p = .025$. Specifically, first-generation students were more likely to report the barrier of working at their current jobs, with 65% of first-generation students citing this barrier. First-generation students are more likely to work in general than continuing-generation students in our sample, χ^2 (2, 676) = 8.86, $\varphi = .12$, $p = .012$. In addition, students' race or ethnicity was significantly related to the

barrier of lack of transportation, χ^2 (3, 647) = 22.29, $p < .001$, with Black or African-American students having the highest number of respondents reporting the barrier of transportation (n=49, 29%). This finding is likely due to the fact that the vast majority of Black or African-American students in our sample were attending the historically black university in a rural location, with limited public transportation and nearby internship opportunities.

Then, the independent t-test analyses indicated that there was a significant effect for age on the obstacle of academic scheduling, $t(533) = 3.13$, $p = .002$, with younger students being more likely to report this barrier (25.25 versus 27.22), and on the obstacle of transportation problems, $t(235) = 3.05$, $p = .003$ (24.48 versus 26.52).

Institutional factors and barriers to internship participation. Finally, we report the results for analyses regarding institutional factors and their association with obstacles to internship participation. First, student enrollment status significantly differed in reporting three barriers: heavy course load χ^2 (2, 676) = 15.22, $p < .001$; 2); the need to work at χ^2 (2, 676) = 4.72, $p = .029$; and transportation problems χ^2 (1, 676) = 5.32, $p = .021$. Specifically, full-time students were more likely to report the barrier of a heavy course load (n=313, 60%), part-time students were more likely to report the obstacle of working (n=102, 68%), and full-time students were more likely to report the problem of transportation (n=110, 21%). In addition, there was a significant effect for GPA on students' lack of internship opportunities in their fields, t(627) = 2.52, $p = .012$, with students reporting this obstacle having lower GPA (5.58 versus 5.91)(Note that we used students' self-report GPA using a 1-8 scale).

Finally, students' majors were significantly associated with three barriers to internship participation: the need to work, χ^2 (8,671) = 17.46, $p = .026$; heavy course load, χ^2 (8, 671) = 17.60, $p = .024$; and insufficient pay offered, χ^2 (8, 671) = 19.47, $p = .013$. Students in Arts & Humanities most frequently reported a heavy course load (n=52, 68%) followed by students in Physical Sciences, Mathematics, & Computer Science (n=36, 67%), Biological Sciences, Agriculture, & Natural Resources (n=46, 65%), and Communication, Media, & Public Relations (n=17, 59%). Then, students in Arts & Humanities programs reported the highest incidence of the insufficient pay obstacle (n=34, 45%), followed by Communication, Media, & Public Relations (n=12, 41%), and Health Professions (n=10, 40%). For the barrier of working at a current job, Health Professions students reported this obstacle most frequently (n=20, 80%), followed by Arts & Humanities (n=52, 68%), Social Sciences (n=60, 68%) and Biological Sciences, Agriculture, & Natural Resources (n=43, 61%).

Multivariate logistic regression results. Based on these results, we then used the following variables as independent measures in logistic regression models (shown in Table 2): first-generation status (with reference group of continuing-generation students), race (White or Caucasian as the reference group), age, institution (with reference group of the Southern WI PWI 1), academic enrollment (with reference group of full-time enrollment), academic program (with reference group of Arts & Humanities), GPA, employment status (with the reference group of part-time employment), and parental income. Personal income was excluded from the analysis due to its wide variation and inclusion of multiple sources of income.

Table 2

Results of multivariate logistic regression models to predict students' having barriers to internships

	Model 1 Need to work		Model 2 Heavy course load		Model 3 Lack of opportunities	
	β (SE)	OR (95% CI)	β (SE)	OR (95% CI)	β (SE)	OR (95%CI)
Constant	1.32* (.65)	3.75 (.06, 2.61)	2.08*** (.59)	8.02 (.94, 3.26)	1.19* (.59)	3.3 (.05, 2.36)
Race/ethnicity, reference group = White or Caucasian						
Asian or Asian-American	-.17 (.37)	.84 (-.9, .57)	-.07 (0.34)	.93 (-.74, .61)	-.09 (.34)	.92 (-.76, .57)
Black or African American	-.38 (.38)	.69 (-1.13, .38)	-.37 (0.36)	.69 (-1.07, .33)	.14 (.34)	1.15 (-.54, .81)
Hispanic or Latino	-.16 (.36)	.85 (-.86, .56)	.24 (0.33)	1.28 (-.39, .9)	-.48 (.33)	.62 (-1.13, .15)
Age	-.02 (.02)	.98 (-.05, .01)	-.03* (0.01)	.97 (-.06, 0)	-.02 (.01)	.98 (-.05, .01)
First-generation status, reference group = continuing-generation students						
First-generation students	.34 (.21)	1.41 (-.07, .76)	0.17 (.19)	1.19 (-.2, .55)	-.22 (.19)	.8 (-.59, .15)
Institution, reference group = Southern WI PWI						
MD	.31 (.37)	1.36 (-.42, 1.05)	1.07** (.35)	2.91 (.4, 1.77)	.16 (.32)	1.17 (-.47, .79)
SC HBCU	.46 (.48)	1.59 (-.47, 1.4)	-.07 (.43)	.93 (-.92, .78)	-.21 (.42)	.81 (-1.04, .61)
WI Technical College	.14 (.3)	1.15 (-.45, .74)	.05 (.27)	1.05 (-.48, .58)	-.52 (.28)	.59 (-1.07, .01)
Central WI PWI	.17 (.34)	1.19 (-.49, .86)	.9** (.34)	2.45 (.24, 1.6)	.77* (.31)	2.15 (.17, 1.38)
Academic enrollment status, reference group = full-time enrollment						
Enrollment – Part-time	.5 (.31)	1.65 (-.09, 1.11)	-.22 (.26)	.8 (-.73, .29)	.02 (.27)	1.02 (-.5, .54)
Academic program, reference group = Arts & Humanities						
Biological Sciences, Agriculture, & Natural Resources	-.55 (.42)	.58 (-1.38, .27)	-.34 (.39)	.71 (-1.12, .43)	.13 (.37)	1.14 (-.59, .86)
Business	-.74* (.35)	.48 (-1.44, -.06)	-.73* (.32)	.48 (-1.38, -.1)	-.19 (.31)	.82 (-.8, .42)
Communication, Media, & Public Relations	-.36 (.59)	.7 (-1.5, .81)	-.51 (.53)	.6 (-1.54, .54)	.3 (.5)	1.35 (-.69, 1.3)
Engineering	-1.33** (.46)	.26 (-2.24, -.45)	-.7 (.41)	.5 (-1.52, .1)	-.2 (.43)	.82 (-1.05, .63)
Health Professions	.1 (.78)	1.11 (-1.32, 1.79)	-1.19* (.59)	.3 (-2.37, -.06)	-.29 (.57)	.75 (-1.44, .8)
Physical Sciences, Mathematics, & Computer Science	-.82 (.45)	.44 (-1.71, .05)	-.18 (.43)	.84 (-1.02, .67)	.12 (.4)	1.13 (-.67, .91)
Social Sciences	.01 (.42)	1.01 (-.81, .83)	-.74* (.37)	.48 (-1.48, -.02)	.39 (.36)	1.48 (-.3, 1.1)
Social Service Professions	-.67 (.42)	.51 (-1.5, .15)	-.84* (.38)	.43 (-1.6, -.1)	.32 (.36)	1.38 (-.39, 1.04)
GPA	.05 (.06)	1.05 (-.06, .16)	-.05 (.05)	.95 (-.15, .05)	-.08 (.05)	.92 (-.18, .01)
Parental income	.02 (.06)	1.02 (-.1, .14)	-.09 (.05)	.92 (-.2, .02)	-.12* (.06)	.89 (-.22, -.01)
Employment status, reference group = part-time employment						
Full-time employment	1.03** (.36)	2.79 (.35, 1.76)	-.63* (.28)	.53 (-1.2, -.08)	-.08 (.28)	.93 (-.63, .47)
No employment	-1.99*** (.24)	.14 (-2.47, -1.53)	.12 (.22)	1.12 (-.31, .55)	.06 (.22)	1.06 (-.37, .48)

Table 2 **(continued)**

	Model 4 Insufficient pay		Model 5 Lack of transportation		Model 6 Lack of child care	
	β (SE)	OR (95%CI)	β (SE)	OR (95%CI)	β (SE)	OR (95%CI)
Constant	.15 (.62)	1.16 (-1.06, 1.37)	-.62 (.87)	.54 (-2.3, 1.1)	-3.32** (1.06)	.04 (-5.44, -1.27)
Race/ethnicity, reference group = White or Caucasian						
Asian or Asian-American	-.45 (.38)	.64 (-1.24, .27)	.68 (.43)	1.97 (-.19, 1.51)	-.03 (.61)	.97 (-1.37, 1.08)
Black or African American	-.13 (.37)	.88 (-.87, .58)	.74 (.44)	2.09 (-.15, 1.6)	1.05* (.51)	2.84 (.04, 2.04)
Hispanic or Latino	-.03 (.33)	.97 (-.69, .62)	.78 (.44)	2.17 (-.11, 1.62)	-.21 (.62)	.81 (-1.57, .93)
Age	-.02 (.02)	.98 (-.05, .01)	-.04 (.02)	.96 (-.09, 0)	.02 (.02)	1.02 (-.02, .07)
First-generation status, reference group = continuing-generation students						
First-generation students	.22 (.2)	1.24 (-.18, .62)	.08 (.26)	1.08 (-.44, .59)	.34 (.34)	1.4 (-.33, 1.01)
Institution, reference group = Southern WI PWI						
MD	.9** (.34)	2.45 (.23, 1.57)	1.53*** (.42)	4.63 (.71, 2.37)	.91 (.54)	2.49 (-0.15, 1.97)
SC HBCU	-.49 (.47)	.61 (-1.42, .44)	.69 (.53)	1.99 (-.33, 1.74)	-1.84* (.91)	.16 (-3.9, -.18)
WI Technical College	.26 (.29)	1.3 (-.31, .83)	.26 (.45)	1.3 (-.65, 1.13)	.51 (.56)	1.67 (-.62, 1.61)
Central WI PWI	1.13*** (.32)	3.1 (.51, 1.76)	2.27*** (.39)	9.67 (1.51, 3.05)	2.65*** (.47)	14.17 (1.75, 3.62)
Academic enrollment status, reference group = full-time enrollment						
Enrollment – Part-time	.55* (.28)	1.73 (.01, 1.09)	.01 (.39)	1.01 (-.78, .76)	.44 (.46)	1.55 (-.48, 1.33)
Academic program, reference group = Arts & Humanities						
Biological Sciences, Agriculture, & Natural Resources	-.38 (.39)	.68 (-1.16, .38)	-1.12* (.56)	.33 (-2.27, -.5)	-.28 (.82)	.76 (-2.02, 1.31)
Business	-.94** (.32)	.39 (-1.57, -.31)	-.33 (.42)	.72 (-1.14, .5)	.26 (.58)	1.29 (-.83, 1.5)
Communication, Media, & Public Relations	-.57 (.53)	.57 (-1.63, .45)	-1.77* (.88)	.17 (-3.79, -.21)	-.8 (1.18)	.45 (-3.84, 1.23)
Engineering	-1.05* (.44)	.35 (-1.94, -.19)	-.17 (.59)	.84 (-1.37, .98)	-.73 (.95)	.48 (-2.84, 1.05)
Health Professions	-.75 (.57)	.47 (-1.89, .35)	-.38 (.81)	.68 (-2.12, 1.14)	.58 (.87)	1.78 (-1.23, 2.26)
Physical Sciences, Mathematics, & Computer Science	-1.71*** (.5)	.18 (-2.75, -.78)	-.58 (.57)	.56 (-1.74, .52)	.1 (.76)	1.11 (-1.44, 1.59)
Social Sciences	-.15 (.37)	.86 (-.87, .58)	.17 (.46)	1.18 (-.72, 1.08)	.92 (.67)	2.51 (-.37, 2.3)
Social Service Professions	-.24 (.37)	.79 (-.98, .49)	-.38 (.48)	.69 (-1.32, .56)	.41 (.68)	1.5 (-.92, 1.79)
GPA	.04 (.05)	1.04 (-.06, .15)	-.1 (.07)	.91 (-.23, .04)	-.08 (.09)	.92 (-.26, .1)
Parental income	-.06 (.06)	.94 (-.17, .06)	-.13 (.08)	.88 (-.29, .03)	-.16 (.11)	.86 (-.38, .05)
Employment status, reference group = part-time employment						
Full-time employment	.03 (.29)	1.03 (-.55, .6)	-.7 (.46)	.5 (-1.64, .17)	-.19 (.48)	.83 (-1.17, .73)
No employment	-.55* (.25)	.58 (-1.05, -.08)	1.1*** (.27)	3 (.57, 1.64)	.06 (.41)	1.06 (-.78, .85)

Note: Each model is estimated using 596 observations. Eighty observations were removed due to missing values.
$*p < .05$; $**p < .01$; $***p < .001$. OR = odds ratio, CI = confidence interval.

The first model focused on the barrier of the need to work, and the results indicated that academic discipline and employment status were two significant factors influencing this obstacle. First, compared to Arts & Humanities students, the odds of reporting the need to work at a current job for students in Business was 0.48, which means that the odds for Business program was 52% lower than the odds for Arts & Humanities students. Likewise, the odds for Engineering students to report this obstacle was 74% lower than the odds for Arts & Humanities students (odds ratio [OR] = .26). In addition, the odds for full-time working students was 179% higher (OR = 2.79) to report needing to work than the odds for students employed on a part-time basis, while the odds for students without employment was 86% lower (OR = .14) than the odds for those with part-time employment.

In the second model, the obstacle of heavy course load, significant predictors included age, academic major, and employment status. For one unit increase in age, we expect to see about 0.03 (OR = .97) decrease in the odds of reporting the barrier of a heavy course load. In addition, the odds for students in Business over the odds for students in Arts & Humanities was 0.48, meaning that the odds for Business students to report the course load barrier was 52% lower than the odds for Arts & Humanities students. Likewise, the odds for Health Professions students to report the course load barrier was 70% lower (OR = .3), the odds for students in Social Sciences was 52% lower (OR = .48), and the odds for Social Service Professions student was 57% lower (OR = .43) than the odds for Arts & Humanities students. Last, the odds for full-time employed students to report course load barrier was 47% lower (OR = .53) than the odds for part-time employed students.

Parental income was the only significant predictor in the third model of the barrier of the lack of internship opportunities. Students with high parental income were less likely to report lacking internship opportunities. For one unit increase in parental income, we expect to see about .11 decrease in the odds of reporting a lack of internship opportunities (OR = .89).

Next, in the model of insufficient internship pay, the odds for students enrolled part-time to report insufficient pay as a barrier to internship participation was 1.73 times as high (or 73% higher) than the odds for full-time students. Academic discipline was also a significant predictor, with the odds of Business students reporting insufficient pay for being 61% lower (OR = .39), the odds for Engineering students was 65% lower (OR = .35), and the odds for students in Physical Sciences, Mathematics, & Computer Science major was 82% lower (OR = .18) than the odds for Arts & Humanities students. In addition, the odds for students without employment was 42% lower (OR = 58) than the odds for students with part-time employment.

In the model of lack of transportation, academic discipline and employment status showed as two significant factors. Students in Biological Sciences, Agriculture, & Natural Resources and Communication, Media, & Public Relations were less likely to report a transportation barrier. The odds for students in Biological Sciences, Agriculture, & Natural Resources to report a transportation barrier was 67% lower (OR = .33), and the odds for students in Communication, Media, & Public Relations was 83% lower (OR = .17) than the odds for Arts & Humanities

students. Additionally, students without employment had higher odds to report a transportation barrier, which was three times as high (or 200% higher) than the odds for part-time employed students. Finally, the odds for Black or African-American students to report child care barrier was 2.84 time as high (or 184% higher) than the odds for White or Caucasian students.

Focus group data. Next, we report how different types of student characteristics appeared to interact with specific barriers to internship participation.

Socioeconomic status and family resources. Several students reported that because they were juggling multiple financial and family obligations, they simply could not engage in unpaid or poorly paid internships. The need to work to pay for a combination of rent, food, bills, tuition, and other expenses were often cited by students as a reason for forgoing an internship. In some cases, an additional financial obligation was the need to contribute financially to their family while attending college. For example, one student worked two jobs while a full-time business student, one as a bank teller for pay to support himself, and the other as unpaid staff at his brother's pizza restaurant, with the income from the restaurant being used to support his elderly parents. This student felt that his inability to do an internship would limit his post-graduation career prospects, because, "I don't have the resources for an internship."

In contrast, several students who participated in unpaid internships reported they could do so because their family was able to provide resources to offset the financial costs of unpaid work, such as gifts or loans of money from parents or room and board provided by relatives who lived near the internship site. The abilities of some students to draw upon familial financial capital to weather the costs of unpaid internships, while others lacked such resources while being responsible for others' well-being, highlights the different ways that capital, family, and opportunity interact when students pursue internships.

Age and family responsibilities. Students older than the age group commonly associated with "traditional" college students (i.e., 18–24 years old) said their age was an important obstacle to participating in an internship. These older students tended to be financially independent and have family-related obligations that some younger students did not yet have. As one student at the technical college in Wisconsin explained, "You don't necessarily have the opportunity if you're trying to do a career change [later in life] to do an internship, because you have bills, family, and all that stuff."

Other participants described needing additional time to care for elderly or sick family or dependent children, which in combination with their financial and work-related obligations, made it difficult for these students to pursue internships. Specifically, many of these students reported that they had to take work full time to support themselves and their families, which often had inflexible 9-to-5 schedules that conflicted with the schedules of most internships.

First-generation college students and family expectations and resources. Next, first-generation college students reported that they felt that a lack of experience with higher education in their families was an obstacle to their participation in internships. These students felt that they

lacked knowledge and the social connections needed to obtain internship opportunities and other forms of employment. One student who felt unprepared to obtain an internship explained that, "I grew up in a family that … neither of my parents had gone to college, and one of my parents didn't even go to high school." This student received institutional support to overcome the self-doubts that arose in light of her unfamiliarity with the job-seeking process and ultimately obtained an internship. The experience was meaningful, as she stated that, "So this internship just continues to help build my confidence, my capabilities, my belief that my own success is possible."

Some first-generation students also expressed reluctance to travel for an internship, viewing the proposition as potentially risky. These students reported that their families, while supportive of their educational pursuits in general, were unfamiliar with the post-college career preparation process. In some cases, families were not be supportive of the idea of pursuing an internship, especially those that were unpaid and required travel and relocation expenses. As one student explained, "[My parents] want me to be closer to them, so when I tell them I'm going to a different state or a different part of the state [for a summer internship], they're just like, 'Well, you know, you can always come home and just work.'"

Place-bound students and transportation issues. Some students also described being place-bound and were thus unable to travel to an internship site, either due to a lack of quality public transportation or because of a lack of a dependable vehicle. Being place-bound was a particular problem for students at the historically black university, which was located in a small rural community. In fact, for students at this university, several reported that the internships they were interested in required moving to another city—a situation made untenable because some of these internships did not provide compensation and/or assistance with housing. Without a regular paycheck, sizable scholarships, or generous family support, these internships seemed impossible for students at this university to pursue. As one pair of students explained, with some laughter at the apparent absurdity of the situation:

> Student 1: I mean, if the internship is like two hours away. How am I going to get there?
>
> You provide the transportation?
>
> You going to lend me your car? [Laughter].
>
> I'd like that, you know. Not everybody has a car. Not everybody has money. You know what I'm saying. I can't go to New York City or go to Atlanta. You know, just live downtown. I can't do that. Because I don't have money. You know, you got to pay me something, $7.25 an hour. No. What's that going to pay for?
>
> Student 2: Get you some polish at the store and you can paint your own nails.
>
> Student 1: And that's nothing.

While universities in urban centers may have more internship opportunities, students in these cities expressed concerns about the reliability of public transportation, particularly for those

students who did not own or have regular access to a dependable car. For example, students in Maryland felt that the public transportation system was unreliable, time-consuming, and, in some cases, unsafe, that they effectively felt place-bound with respect to the immediate environs of their institution. In one focus group, all three participants expressed the same concern about transportation, and were looking for internship opportunities that were near their homes or near campus, and had chosen not to apply for internships for which transportation would be required.

RQ3: What are the mechanisms by which these barriers obstruct access to internships?

Finally, we draw upon our qualitative focus group data to report findings regarding the mechanisms that appear to shape precisely how the various barriers to internship participation influence student decisions and behaviors. .

The data highlight three primary mechanisms whereby barriers to internships influence students: The barriers impose intractable time conflicts, the barriers create challenges in the internship search and vetting process, and the barriers entail conditions that influence students to self-select not to participate. Importantly, we view these mechanisms as holistic and additive phenomena—such that students may experience a combination of barriers which are themselves exacerbated by financial, sociocultural, or institutional factors.

Multiple barriers impose intractable time conflicts. Barriers to internship participation often interact with one another to impose time pressures and intractable scheduling conflicts among work, classes, study time, family responsibilities, and other commitments, to which it may be impossible to add internship hours. For example, one student at a university in Wisconsin described the scheduling challenges caused by her internship:

> Yeah, everything was just kind of like back-to-back-to-back. It was like consistent. I'd get up really early in the morning. You've got school. You have your internship, you go to work, and that's like every single day. So, I would go to the internship in the morning for a couple of hours, and then, and I would go to school, and then, sometimes, I would come back to fulfill the hour requirement. And then, I would go to work like normal.

While some students hoped to schedule an internship over the summer when their academic load was less onerous, students working full-time jobs found the scheduling requirements of internships to be problematic. As one such student at the Maryland university explained:

> I'm a full-time worker. I work for the state of Maryland and I've just noticed that the internships presented are in the summertime, 40 hours a week, which just doesn't fit with my full-time schedule. … The people that I've known in my program to do internships, they don't have fulltime jobs. You know? So, they're able to do that. I have to work.

Students with dependent children also reported challenges scheduling internships with work and their other responsibilities. As one such Wisconsin student at explained, "Once you have kids, that's an automatic obstacle for a lot of things because you have to consider all of the child

care and the scheduling." Other students reported scheduling problems posed by family obligations to care for sick or elderly relatives, or working unpaid in a family business. These observations underscore how students' financial and personal circumstances may influence their ability to pursue an internship experience.

Further complicating matters for some, several students who maintained paid employment in areas unrelated to their major typically did so because they lacked experience in their field—which they sought internships to provide. However, given that internship pay (if available) was often not enough money to cover tuition and other basic needs, some continued to work at their paid employment, even if it offered no career-related experience or benefits. Ultimately, as many of the students in the focus groups observed, the time students spend at internships, coursework, and managing "normal jobs" can be a balancing act. A number of students said their academic programs were especially challenging and required extra study time to receive desired grades, such that adding the challenge of an internship could upset this delicate balance.

Multiple barriers create challenges in the internship search and vetting process. Another mechanism obstructing student participation in internships is that financial, sociocultural, and institutional barriers create serious challenges in the internship search and vetting process. Students who had had an internship in our focus groups reported how they had found them through friends, family, former employers, or volunteer experiences. This networking helped them to identify, apply for, and attain internships more easily. For example, one student described needing to know people in order to obtain a coveted internship placement in a local hospital. For students who are not well connected the process of finding an internship can be especially difficult, as they may lack social connections to the professional settings needed to access internships. As one such student at a university in Wisconsin explained,

> I mean, it's really like, you know how they say, like, getting a job, like a real job, is all about, like, knowing people, and having connections. Well, I mean, I think it's really the same thing with internships, too.

Students also struggled to obtain desirable internships because of the vetting process, which some described as lengthy and disheartening; and some students felt disadvantaged because they were competing for internships with students from more prestigious universities. One student said explained that, "At [my university] they put a lot of pressure on us to get internships, but they are so hard to get, so it's very frustrating and annoying at times." Another student in that same focus group chimed in to say, "And even if we do have the experience, it's not like we're going to get it because it's competitive." The first student responded to this observation by saying, "Yes, you've got to deal with the Ivy League kids, everybody else comes from these big schools … and we're just a small institution and people don't really know who we are."

Several students found the application process intimidating and discouraging, feeling they lacked the needed background to succeed. As one student explained, when internship opportunities become available, "I don't always feel qualified for them," and so he tends to not pursue the opportunity at all. Two students in another focus group agreed with this general

assessment and stated many internships tended to require prior relevant experience that they lacked. These students felt that the situation was somewhat ironic because their perception was that internships were themselves primarily a way for students to gain experience (i.e., a catch-22, *you need experience to gain experience*). For example, one student with financial need lacked the transportation needed to obtain volunteer experiences—which she felt was needed obtain an internship—and this situation "kind of discourages me from applying altogether."

Barriers collectively create conditions for students to self-select out of internships. The cumulative impact and interconnected nature of financial and sociocultural barriers, and the lack of institutional supports to help students overcome them, creates a situation that too often leads students to self-select *out* of an internship opportunity. This mechanism points to the accumulative character of barriers to internship participation. Unpaid or poorly paid internships are untenable for students with financial need. To this situation, the work, academic, and family and other responsibilities impose intractable time pressures and conflicts. Additionally, challenges locating internships, the need for social connections to identify and facilitate access to certain internships, and the vetting process all frustrate students who would like to pursue an internship opportunity. This combination of barriers to internship participation, including socioeconomic factors such as unmet financial need, older student status, first-generation student status, and place-bound, often combined in different ways for particular students, creating contexts in which students self-selected against participating in an internship.

While the specific set of factors that constrain particular students varies across our sample of focus groups participants, the rational calculation on the part of students to self-select not to participate in internships often follows a similar recognition of the—unavailable—time, resources, knowledge, and social connections that successful college internships require. As a student at the historically black university in South Carolina explains,

> With the housing and the living expenses, like, you can get an internship in New York City, right. But how are you going to pay for that? You know. And for me I feel like, if I'm going to go and work for your company for free, some of them are free, they're unpaid, you know, unpaid internships. I need to at least have my housing and my transportation covered. That's the least that you could provide is transportation and housing. With some of them they don't provide transportation or housing. So, I was, just give up.

For students who desire to participate in internships but cannot, the combination of barriers to internship participation and socioeconomic factors create a situation where some students ultimately decide to postpone an internship or to "just give up."

Discussion

Our goal in this paper was to contribute new empirical insights into college students' access (or lack thereof) to one of the most widely promoted co-curricular experiences in higher education today—college internships. Despite the widespread advocacy of internships, however, our data show that access to internships is not equitable and risks reproducing privilege and

inhibiting social mobility. Instead of being as accessible as an English 101 course, access to internships is hindered by a diverse range of obstacles that intersect in the lives and experiences of individual students. In the remainder of this paper, we highlight key findings from the study and how they contribute to the literature on internships and experiential learning, and subsequent implications for policy, research and practice.

Problematizing the Discourse of High-impact Practices and Promotion of Internships

Internships have entered the popular and policymaking lexicon largely due to their designation as a high-impact practice by the Association for American Colleges and Universities (Kuh, 2008) and higher education scholars (Kilgo et al., 2015). Such a designation is largely supported by the research literature, which has long demonstrated that internships have positive impacts on students' academic and career success (e.g., Binder et al., 2015; Saniter & Siedler, 2014), leading some to call for postsecondary institutions to scale up these opportunities and even require them for graduation (Kuh, 2008; Wawrzynski & Baldwin, 2014).

However, this discourse largely unfolds as if access to internships is unproblematic—that it is as easy as taking a capstone course, joining a campus-based learning community, or pursuing a service-learning experience—which are other high-impact practices the Association for American Colleges and Universities (2008) and others advocate. But our data are clear—in our sample of five diverse postsecondary institutions, for the 1,060 students who answered "no" to having participated in an internship in the past 12 months, 676 students (64%) had in fact wanted to pursue internships but could not for a variety of reasons. Thus, internships are substantively different from other high-impact practices such as service-learning that are campus-based and theoretically open-access, in both their form and accessibility. Instead, internships are more akin to study abroad programs (which are also a high-impact practice) in that they are largely inaccessible to students who may not have sufficient financial capital, social networks, and, especially, "free" time outside of work or familial obligations. Thus, we conclude that if what Saniter and Siedler (2014) argued is true—that internships are a "door opener to the labor market" (p. 22)—these doors of opportunity are clearly closed to a significant number of today's college students.

As a result, we argue that internships should be removed from the list of high-impact practices until and unless equitable access can be guaranteed or at least highly probable for *all* students attending colleges and universities in the U.S. (see also O'Neill, 2010). In emphasizing institutional diversity, we underscore the importance of making internships and other experiential learning opportunities accessible for students not only in well-resourced elite universities, but also community colleges, regional comprehensive universities, and historically black universities and colleges where institutional and student resources may be more limited. Furthermore, our concern over the high-impact practices designation is based on the prospect that in advocating or even requiring internships for graduation, institutions may be creating yet another barrier for some students—especially working, low-income, first-generation students in certain disciplines—to complete their postsecondary education. Ultimately, however, given mounting evidence that employers increasingly view internships as an important signal of competence and

skill, students who are unable to add internships to their résumés will be at a competitive disadvantage when they seek employment upon graduation (Nunley et al., 2016; Saniter & Siedler, 2014).

The Paradox of Work: How the Need to Work Inhibits Gaining Work Experience

One of the most unambiguous findings from our study was how the need to work prevented many students in our sample from seeking and completing an internship. In other words, their ability to gain work experience via an internship was inhibited by their current paid work, which was an important source of income to support themselves and/or their families. Consider that 43% percent of full-time undergraduates and 81% of part-time students were working in 2017 while attending college, with 71% of those part-time students working over 20 hours a week (National Center for Education Statistics, 2019). While these figures are lower than in 2005, the rising price of tuition and living expenses is making work an essential part of the college experience for the majority of students in the U.S., such that postsecondary educators and leaders must acknowledge that students juggling school and substantive hours at work is no longer the exception but the new normal (Perna, 2010).

While the impact of work on college students' experience and performance may not be universally negative, with some evidence indicating that work may have positive impacts on grades (Dundes & Marx, 2006) and on the development of cultural and social capital for Latinx students (Núñez & Sansone, 2016), research has demonstrated that students working more than 20 hours a week is associated with lower grades for full-time students (McCormick et al., 2010) and that working is associated with longer times to completion and transitions to part-time enrollment (Titus, 2010). Ultimately, our findings make clear that work presents a substantial obstacle to the students in our sample to pursuing internships. In some cases, the problem was that students' current jobs paid considerably better than many internship opportunities, with one student explaining that the internships he had found online, "were paid, but it's not like my salary, so that's just not feasible." For many students, their salaries and paychecks were not only going toward their own tuition and bills, they also provided essential income to support their own families, elderly parents, and even more distant relatives.

Beyond continuing to examine the dynamics among work, college and student success, future research should investigate the impacts of work on first-generation students, who were more likely to report the barrier of working at their current jobs (65%). While this relationship could be explained by the fact that many first-generation students work to support themselves, prior research shows that these employed students tend to view internships as exploitative work situations (O'Connor & Bodicoat, 2017). These students also favor academic work over cocurricular activities (Bathmaker et al., 2013), which suggests that first-generation students citing the need to work as an internship obstacle may have a poor understanding or opinion about internships. Given that internships may connect students with professional networks that lead to future employment (Frenette, 2013)—contacts that can be especially valuable for first-generation students—future research should explore whether the mere perception of internships impedes pursuit or participation.

Geography and the Spatial Aspects of Internship Opportunities

One obstacle students discussed surprised our research team was that of geography and the ways that space, resources, and opportunity intersected for students as they considered pursuing internships. For students at the rural HBCU, the issue was relatively straightforward, with very few organizations near the campus that could host interns, except a large automotive parts manufacturer and the service, food, and retail sector establishments that encircle most cities and towns. But even for students attending institutions within metropolitan areas, space and distance became an issue if a potential internship site was inaccessible by public transportation, especially for low-income students who lacked access to personal vehicles. Then, for students who lacked the funds to finance an internship in expensive cities like Seattle or New York City, geography, family ties, social capital, and money became intertwined forces that essentially restricted opportunity to all but the well-connected and wealthy.

The spatial dimensions of internship opportunity and access are interesting to consider in light of growing research on what some call "education deserts," or locations where few or no colleges or universities are located (Blagg & Chingos, 2016; Hillman, 2016). The idea of education deserts is in part based on long-standing interests in public health and community food security in "food deserts," or areas lacking access to healthy and affordable food, which in turn may exacerbate poor health outcomes of nearby residents by forcing them to shop at nearby bodegas or fast food outlets (Cummins & Macintyre, 2002). In a similar fashion, the lack of nearby postsecondary institutions may make the problem and process of a student choosing which college to attend less an issue of information, expectation, and preference, and one that is structurally constrained and delimited by the students' geographic location.

While it may be tempting to elaborate on these ideas by proposing that internship deserts exist, it is instructive to consider critiques of the influential food desert idea. These critiques include suggestions of geographic determinism, largely based on evidence that food shopping behaviors are not solely (or even primarily) shaped by proximity (Antin & Hora, 2005; Cannuscio et al., 2013; Cummins et al., 2005), and that issues of price, habit, culture, time, and space collectively shape food choice and diet (Antin & Hunt, 2012). Similarly, students appear to identify, select, and then pursue internships based on a host of criteria that include but are not limited to spatially proximate availability. In making this observation we are not claiming that physical access is unimportant, but instead that the notion of a "desert" of internships would overstate the impact of geography at the expense of other issues documented in our study such as work, heavy course loads, problems with public transportation, discipline-specific shortages, and so on. Further, potential responses to the lack of nearby internships such as online experiences, course-embedded projects, undergraduate research, and subsidized relocations have the potential to mitigate the issue of spatial opportunity.

Multiple Barriers to Internships Intersect and Shape Students' Lives and Opportunities

Finally, one of the primary contributions of our study to the literature on college internships is the documentation of how obstacles such as the lack of opportunities in certain disciplines,

travel and relocation barriers, and the need to work do not operate in isolation as singular forces, but instead these barriers intersect and function as collective constraints on their lives and opportunities. Consider that 68 students reported that their need to work and their heavy course load resulted in their not being able to pursue internships, and that 42 had these two problems and the additional obstacles of not finding internships in their fields and opportunities with sufficient pay. While some students did report only a single barrier (e.g., 60 reported only the need to work), for many students these obstacles interact with one another and function as a multifaceted web of constraints. These data, which are corroborated by our qualitative findings, contribute new insights to the literature on internships that had previously examined these issues across multiple high-impact practices (Finley & McNair, 2013) or in doctoral theses involving small samples (Matsumoto, 2015; Taylor, 1988).

In considering how multiple financial, sociocultural, and institutional forces and structures constrain student opportunity, it is also instructive to consider two theoretical frameworks that address these very issues. First, Bourdieu's (1986) theory of practice asserts that individuals' positions in society are shaped by their possession of certain forms of capital, and how a given field of structured opportunities rewards (or not) these dispositions. With respect to internships, students' possession of financial and social capital greatly enhances their prospects of securing and then completing these experiences that may "open the doors" to career opportunities (Saniter & Siedler, 2014). In this way, Bourdieu's focus on capital as a critical precursor to social mobility and positioning sheds light on the ways in which internships can serve reproduce privilege, power, and position (see also Martin, 2003).

Second, intersectionality theory scrutinizes the way that overlapping structural features in social life (e.g., hiring discrimination, unequally resourced schools, etc.) act to oppress and marginalize particular identities and peoples, while explaining how individuals have overlapping identities that affect how they are seen and treated (Crenshaw, 1991; Núñez, 2014). An intersectional perspective is relevant to the current topic of internships because it helps to explain how multiple obstacles may intersect and influence an individuals' life and opportunities, while highlighting the structural inequalities that continue to exist in our educational system and labor markets (Curiale, 2009; Perlin, 2012). In the case of the students in our data, we do not claim that all students reporting obstacles to internships are marginalized—in fact, several were white, middle-class students working at well-paying jobs—but we do argue that the opportunity structures in place can serve to reproduce class privilege, and keep first-generation, low-income, and/or working students from reaping the benefits of an internship experience. Future work in this area could focus on how specific marginalized groups experience the obstacles reported in this paper, while also paying closer attention to historical, organizational, and individual-level forces intersect to shape student experiences (Núñez, 2014).

Implications for Research, Policy, and Practice

Our study clearly indicates that while an internship may open the doors of opportunity for some, access to these potentially transformative experiences are by no means available to all college students and instead may represent yet another obstacle to social mobility as well as a

vehicle for reproducing privilege and power. Of course, these barriers are unfortunate for all students, but may be especially problematic for low-income, first-generation, and/or minoritized students for whom an internship may be an especially valuable professional experience. Future research on the complex and multifaceted barriers to internship participation is essential, especially in this era of high-impact practices and an increasing focus on college and university campuses on student employability. Scholars across the disciplines have a bevy of potential topics that could be investigated on these issues, but studies of disciplinary and institutional variation, the role of space and geography, and marginalized students' strategic responses to the obstacles outlined in this paper are some of the issues that warrant further study.

Perhaps more important than additional empirical research, however, is applied or translational research that examines real-world problems of practice in ways that generate useful and actionable evidence that can be used by practitioners and policymakers on the ground (Coburn & Penuel, 2016; Sackett et al., 2016). As different types of internship and experiential learning programs are introduced that attempt to avoid and/or address the obstacles outlined in this paper—making work-study funds available for on- or off-campus internships, subsidies for unpaid internships, course-embedded projects, and online experiences—it will be important for rigorous research and program evaluation to scrutinize their impacts and potential scalability. Furthermore, specific actions that can be taken to help level the playing field of internship access is to reduce the need to work while in college via increasing need-based aid and state support for public higher education, and for institutions to consider ways that on-campus employment can facilitate student success and to foster a campus culture that explicitly supports the unique needs of working students (Perna, 2010).

Ultimately, addressing and ameliorating the challenges to internship access will require not only such applied scholarship, but also collaboration among the various stakeholders of the internship process, including college educators, advisers, and administrators, employers, and policymakers, and a collective commitment to ensuring that higher education serves to enhance and not inhibit students' social mobility and career prospects.

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