Closing the doors of opportunity:

How financial, sociocultural and institutional barriers inhibit access to college internships

RESEARCH BRIEF #8 • NOVEMBER 2019

MATTHEW T. HORA, MATTHEW WOLFGRAM, ZI CHEN

CCWT
CENTER FOR RESEARCH ON
College-Workforce Transitions

Wisconsin Center for
Education Research
SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN–MADISON

Introduction

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 can cultivate valuable professional experiences and networks for students, 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, 2018a). As a result, internships have been labeled a "high-impact practice" (HIP) 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, 2002). 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, Duberley, Sommerlad, & Scholarios, 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, there are growing concerns that there are significant numbers of students who are "working multiple part-time jobs, taking out additional loans, or even skipping meals" in order to add the all-important internship to their resume (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).

Few empirical studies have examined the nature and extent of barriers to internship participation faced by college students.

Yet few empirical studies have examined the nature and extent of barriers to internship participation faced by college students. Promising lines of inquiry have explored how financial (Barnett-Vanes, Kedia, & Anyangwe, 2014; Shade & Jacobson, 2015), socio-cultural (Boulton, 2015; Frenette, 2013), and institutional (Allen, Quinn, Hollingworth & Rose, 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), 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 address the following questions:

RESEARCH QUESTIONS

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

To interpret and explain the results of our study, 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 doing so, while 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 in creating the conditions where all students - regardless of race, class, or identity - have access to internships or similar experiential learning opportunities.

Background

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, Muhummaddun, Mohamed, Ramli & Aman, 2014; Nunley, Pugh, Romero & Seals, 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, Pugh, Romero & Seals, 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: (1) financial, (2) sociocultural, and (3) institutional barriers.

To conceptualize how these different types of barriers may impact 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 which emphasize how modes of production are used by capitalists to generate profit and reproduce class privilege, and instead 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).

Financial barriers to internship participation

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. 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 (Barnett-Vanes, Kedia, & Anyangwe, 2014; The Sutton Trust, 2014). These studies also highlight the fact that working students, who now represent a substantial number of U.S. college students, are simply unable to quit their current jobs in order to take an unpaid position (DiRienzo, 2016; Harvey & Reyes, 2015; Matsumoto, 2015; Perna, 2010; Taylor, 1998).

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). The influential role of social and professional contacts is particularly common in creative industries (Frenette, 2013; Shade & Jacobson, 2015; Allen, Quinn, Hollingworth, & Rose, 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, Duberley, Sommerlad, & Scholarios, 2015; Milburn, 2009). Further, the role of social networks as a barrier to internship participation may be particularly inimical for racially minoritized students (Parks-Yancy, 2012), and for first-generation college students may also lack knowledge from their own social networks about the value of internships to their career development (O'Connor and Bodicoat, 2017).

Institutional barriers to internship participation

Finally, some research exists that 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 resume 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). Finley and McNair (2013) examined student experiences with "high-impact practices" that include internships, finding that a lack of advising and time to commit to programs such as internships was impeding student participation.

Methods

The study reported in this paper employs a concurrent mixed-methods design, where both qualitative and quantitative data are collected and analyzed simultaneously to address the research questions (Creswell, 2014).[1]

Sampling strategies and data collection procedures

Five postsecondary institutions reflecting different geographic locations, student body characteristics, and institutional missions were selected for this study. Participating institutions included the following: (1) a private HBCU in South Carolina (approximately 2,000 undergraduates), (2) a technical college in Wisconsin (18,000 students), (3) a comprehensive university in Central Wisconsin (13,000 undergraduates), (4) a comprehensive university in Southern Wisconsin (4,000 undergraduates), and (5) a comprehensive university in Maryland (2,500 undergraduates). The sampling frame for the study included students in their second half of their degree programs in order to increase the prospects that a student had completed an internship.

For the survey portion of the study, 228 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), and 516 from the Southern Wisconsin university (42% response rate) and 221 from Central Wisconsin university (18% response rate). The survey was completed by a total of 1,548 students across the five institutions with an average response rate of 26%. 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 both included in the study given the focus on understanding barriers to internship participation. Table 1 shows the characteristics of the participating students for both the survey and focus groups.

1 For more details on the methodology used in this study, please refer to supporting documents available at http://ccwt.wceruw.org/

Table 1: Study sample: socio-cultural, institutional and financial characteristics

	Survey Total	MD Institution	SC HBCU	WI TC	Southern WI Institution	Central WI Institution	FG
Observations	N = 676	N = 106	N = 90	N = 155	N = 255	N = 70	N = 100
SOCIO-CULTURAL							
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 (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 and Humanities (%)	76 (11.24)	3 (2.86)	7 (7.87)	23 (15.03)	31 (12.2)	12 (17.14)	10
Biosci, Agri, & NR (%)	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

	Survey Total	MD Institution	SC HBCU	WI TC	Southern WI Institution	Central WI Institution	FG
Observations	N = 676	N = 106	N = 90	N = 155	N = 255	N = 70	N = 100
Comm, Media, & PR (%)	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
PS, Math, & CS (%)	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)	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 (NSSE, 2018). 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).

Note: Program abbreviations are: Biosci, Agri, & NR = Biological Sciences, Agriculture, & Natural Resources; PS, Math, & CS = Physical Sciences, Mathematics, & Computer science; Comm, Media, & PR = Communication, Media, & Public Relations

*p < .05, *p < .01, ***p < .001.

Research instruments

Survey. All survey respondents were asked whether or not they had participated in an internship in the last 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.*

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. For the 1,060 respondents who answered "no" to having participated in an internship, a follow-up question asked if they had been interested in pursuing one. For students who reported an interest in pursuing an internship but did not take one, a follow-up item posed six potential obstacles to their successfully pursuing an internship: 1) course load at school was too heavy; 2) insufficient pay offered; 3) needed to work at current job; 4) lack of transportation; 5) lack of childcare; and, 6) lack of internship opportunities in their field.

Next, we mapped the three primary categories of obstacles identified in the literature review (i.e., financial, socio-cultural, and institutional) to variables in our survey. For the financial obstacles, we elicited information about students' employment status, parental income, and personal annual income. For the socio-cultural 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 or not an internship was required to graduate from their academic program, and their major programs.

Focus Group Protocol. Focus group sessions lasted approximately one 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 an internship, questions were then asked about their motivations for pursuing an internship, the nature of their work in the internship, 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 an 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?"

Analytic Strategies

For analyses of survey data, 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, a series of chi-square test of independence, independent T-tests, and multivariate logistic regression analyses were conducted to address the question regarding the degree to which socio-cultural, academic, and financial factors are associated with the six barriers to internship participation listed in the survey. 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.

The qualitative analysis of focus group transcripts proceeded through the following multi-step process. First, a 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, 2015;

Ryan & Bernard, 2003). Based on themes derived from the analytical memos, the analysts generated a codebook that was reviewed and discussed amongst 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, followed by coding of the entire dataset. Throughout this process, researchers continued to build analytical memos to integrate the data into emerging research findings. 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 both 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 impact students in practice (RQ3), we report only findings from analyses of qualitative data which shed light on this phenomenon.

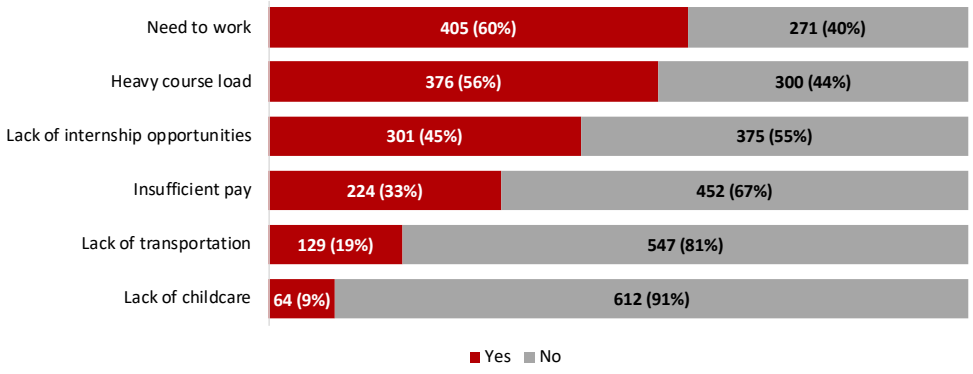
RQ1: What types of barriers keep students from participating in internships?

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 that a substantial number of college students want to pursue an internship but cannot, underscoring the fact that access to internships is a notable problem.

There are a substantial number of college students who want to pursue an internship but cannot due to work and course schedules, lack of opportunities, and insufficient pay.

Among the six barriers to internships included in the survey, 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 childcare (9%).

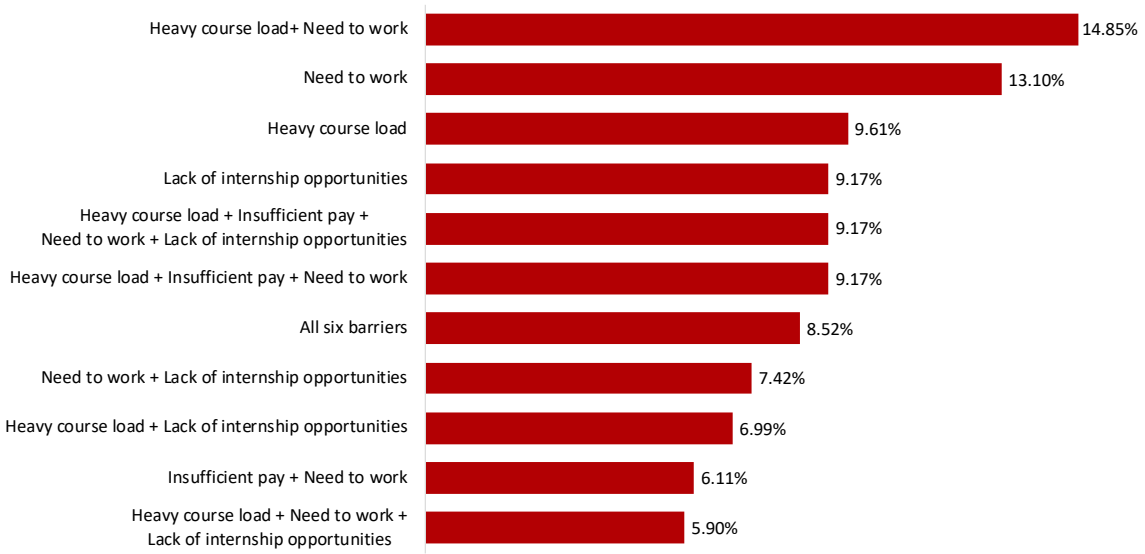
Figure 1



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



These findings indicate that barriers to internship participation tend to co-occur with one another, such that it is more accurate to discuss barriers in the aggregate as intersecting forces, rather than solely as single obstacles that prevent access to an internship.

Focus group data. Next, we turn to the focus group data, which includes insights from students who both did and did not participate in an internship.

Internship compensation. The most commonly discussed barrier to internship participation in the focus groups pertained to compensation – specifically, unpaid or inadequately paid internships. Some students 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 regarding the low-paying internships he found online, "They (the internships) 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.*

Students such as this—who have bills, phone, rent, and expenses like a wedding—sometimes organized 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.

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." 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.

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 addition, students also 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."

Internship location. Finally, another barrier to internship participation was that of geography and location. Many desirable internships are located in cities, which raised issues around travel, relocation and living expenses for students from rural or suburban areas. Some students who participated in an internship were able to access additional resources from their families, such as free room and board available from relatives living in cities like Atlanta or New York City. Others, without such resources, 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 also providing no compensation. Consequently, this student accepted another position on campus, and had to forgo his "dream internship."

RQ2: How, if at all, do these barriers vary across different socio-economic 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), socio-cultural (i.e., first-generation status, race, age), and academic or institutional factors (i.e., enrollment status, internship requirement, major disciplines, and GPA). Detailed results are available in the appendices.

Financial factors and barriers to internship participation. Chi-square results showed that the students with different employment status significantly differed in reporting four barriers: 1) a need to work at current jobs, 2) heavy course load, 3) insufficient pay offered by internship, and 4) a lack of transportation.

Specifically, students working full-time most frequently reported the barrier of insufficient pay offered by internships (n=47, 43%) and also the barrier of needing to work at their current jobs (n=93, 85%). Students without employment most frequently reported the obstacle of having a heavy course load (n=104, 59%) and also the barrier of transportation problems (n=55, 31%). In addition, there was a significant effect of parental income on students' needing to work

at their current job as a barrier to internship participation, with students with such needs reporting higher parental income (3.31 versus 3.02). There was also a significant effect of parental income on students' reporting transportation as an obstacle. Students without transportation as a barrier reported higher parental income (3.28 versus 2.82). Finally, personal income had a significant effect of the obstacle of needing to work at students' current job, with working students reporting higher income ($17,227.80 versus $9,962.57).

Socio-cultural factors and barriers to internship participation. Next, the need to work at a current job was reported differently by first- and continuing-generation students. Specifically, first-generation students were more likely to report the barrier of working at their current jobs, with 65% of first-generation students reporting this as a barrier. In addition, students' race or ethnicity was significantly related to the barrier of lack of transportation, 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 HBCU in a rural location, with limited public transportation and scarce nearby internship opportunities.

Institutional factors and barriers to internship participation. Finally, student enrollment status significantly differed in reporting three barriers: heavy course load, the need to work, and transportation problems. 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%).

Students' majors were significantly associated with three barriers to internship participation: the need to work, a heavy course load, and insufficient pay. Students in Arts and Humanities programs most frequently reported the obstacle of a heavy course load (n=52, 68%) followed by Physical science, Mathematics, & Computer science (n=36, 67%), Biological Science, Agriculture, & Natural Resources (n=46, 65%), and Communications, Media, & Public Relations (n=17, 59%). Students in Arts & Humanities programs reported the highest incidence of the insufficient pay obstacle (n=34, 45%), followed by Communications, 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 Science, Agriculture, & Natural Resources (n=43, 61%).

Table 2: Obstacles to Internships by Student Major/Discipline

Obstacle to Internships	Academic Majors Most Frequently Reporting Certain Obstacles	
	Highest Frequency of Reporting	2nd Highest Frequency of Reporting
Heavy Course Load	Arts & Humanities	Physical Science-Math-Comp Science
Insufficient Pay	Arts & Humanities	Communications-Media-Public Relations
Working at Current Job	Health Professions	Arts & Humanities

Multivariate logistic regression results. Based on these results, we then used the following variables as independent measures in logistic regression models. For detailed results see the appendices.

First, the odds of reporting needing 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 and Humanities students. Likewise, the odds for

Engineering students to report this obstacle was 74% lower than the odds for Arts and Humanities students (OR = .26).

Next, significant predictors for the barrier of a heavy course load 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 a Business program to report over the odds for students in Arts and Humanities was 0.48, meaning that the odds for Business program to report the course load barrier was 52% lower than the odds for Arts and Humanities students. Then, 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 for the barrier of 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).

Table 3: Predictors of Students' Having Barriers to Internships

Barriers	Predictors	
	Positive predictors: student characteristics with higher odd	Negative predictors: student characteristics with lower odd
Working at Current Job	Employment Status: Full-time employment	Major/Discipline: Business, Engineering Employment Status: No-employment
Heavy Course Load	N/A	Age; Major/Discipline: Business, Health Professions, Social Sciences, Social Services; Employment Status: Full-time employment
Lack of Opportunities	N/A	Parental income
Insufficient Pay	Academic enrollment: part-time enrollment	Major/Discipline: Business, Engineering, Physical Sciences, Mathematics, & Computer science Employment Status: No employment
Lack of Transportation	Employment Status: No employment	Major/Discipline: Biological Sciences, Agriculture, & Natural Resources; Communication, Media, & Public Relations
Lack of Childcare	Race: Black or African American	N/A

Next, the odds for part-time enrolled students 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 reporting insufficient pay for Business students 61% lower (OR = .39), and the odds for Engineering students 65% lower (OR = .35) than the odds for Arts and Humanities students.

Finally, the odds for students in Biological Sciences, Agriculture, & Natural Resources to report transportation as a barrier was 67% lower (OR = .33) and the odds for students in Communication, Media, & Public Relations was 83% lower (OR = .17) the odds for Arts and Humanities students. Additionally, students without employment had three times higher odds to report transportation (or 200% higher) than the odds for part-time employed students. Finally, the odds for Black or African-American students to report childcare as a 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.

Socio-economic 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 in order to pay for a combination of rent, food, bills, tuition, and other expenses was often cited by students as a reason for forgoing an internship. 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 negatively impact his post-graduation career prospects, because, "I don't have the resources for an internship."

Age and family responsibilities. Students older than the age group commonly associated with "traditional" college students (i.e., 18-24 years old) discussed that they felt that their age was an important factor that posed obstacles to participating in an internship. This was due to their view that older students tend to be financially independent and have family-related obligations that some younger students do 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."

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. In particular, these students felt that they lacked knowledge and the social connections needed to obtain internship opportunities and other forms of employment. One student 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 lack of familiarity with the job-seeking process, and ultimately was successful in obtaining an internship. The experience was particularly impactful, as she stated that, "So this internship just continues to help build my confidence, my capabilities, my belief that my own success is possible."

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 HBCU, 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.

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

Finally, we report findings regarding the mechanisms that appear to shape precisely how the various barriers to internship participation impact student decisions and behaviors. To address this issue we draw upon the qualitative data from our study.

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 additional internship hours. 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.

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

Ultimately, as many of the students in the focus groups observed, the time students spend at an internship, coursework, and managing "normal jobs" can be a tenuous balancing act. A number of students described that their particular academic program was especially challenging and required extra study time in order to receive a desired grade, such that adding the additional 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. 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.

Students also struggled to obtain desirable internships because of the application 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 explained that, "We'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 also found the application process intimidating and discouraging, in particular because they felt that they lacked the needed background to be successful. Students in one focus group stated that they felt that many internships tended to require prior relevant experience which 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., the 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. While the specific set of factors that constrain particular students varies across our sample of focus group participants, the calculation on the part of students to self-select not to participate in an internship often follows a similar recognition of the—unavailable—time, resources, knowledge, and social connections that successful college internships require. For students who desire to participate in an internship 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."

Conclusions

Despite the widespread advocacy for internships, 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. Here we highlight 4 key findings from our study.

1. Postsecondary leaders and researchers need to problematize the discourse of HIPs and the widespread promotion of internships

Internships have entered the popular and policymaking lexicon largely due to their designation as a High-Impact Practice (HIP) by the Association for American Colleges and Universities (AAC&U) and higher education scholars (AAC&U, 2008). 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., 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 HIPs advocated by the AAC&U (2008) and others. 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 an internship but could not for a variety of reasons. It is clear that internships are substantively different from other HIPs, such as service-learning, which 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 HIP) 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) – it is clear that these doors of opportunity are closed to a significant number of today's college students.

As a result, we argue that internships should be removed from the list of HIPs 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 HBCUs where institutional and student resources may be more limited. Our concern over the HIPs 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 successfully complete their postsecondary education.

We argue that internships should be removed from the list of HIPs until and unless equitable access can be guaranteed or at least highly probable for all students attending colleges and universities in the U.S.

2. Working students are at a clear disadvantage when it comes to taking internships

One of the most unambiguous findings from our study is that 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, since it represented an important source of income to support themselves and/or their families. Consider that in 2017, 43% percent of full-time undergraduates and 81% of part-time students were working 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 are no longer the exception but the new normal (Perna, 2010).

Ultimately, our findings make it clear that work presents a substantial obstacle to the students in our sample to pursuing an internship. Beyond continuing to examine the dynamics among work, college and student success, future research should also investigate the impacts of work on first-generation students, who were more likely to report the barrier of working at their current jobs (65%). This could be explained by the fact that many first-generation students are working to support themselves. But prior work has also shown that these students tend to have a negative view of internships as exploitative work situations and favor academic work instead of co-curricular activities.

It is possible that the image of internships among this population of students is rather poor. Given that internships may provide students with important professional networks that may lead to future employment (Frenette, 2013; Boulton, 2019), which is especially valuable for first-generation students, it is worth exploring whether or not the mere perception of internships acts as an obstacle to participation. Consequently, one of the most pressing research and policy agendas in higher education today should be on ways to make experiential learning opportunities available for working students.

3. Geography may be a critical limiting factor for access to internships

One of the obstacles discussed by students that surprised our research team was that of geography and the ways that space, resources, and opportunity intersected for students as they considered pursuing an internship. For students at the rural HBCU, the issue was relatively straightforward, with very few organizations that could host interns near the university, except a large automotive parts manufacturer and the service, food, and retail sector establishments that encircle most cities and towns. 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, Petticrew, Higgins, Findlay & Sparks, 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 criterion 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 over-state 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.

4. Multiple barriers to internships intersect and inhibit many students' 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 does not operate in isolation as singular forces, but instead these barriers intersect and function as collective constraints on students' lives and opportunities. In considering how multiple financial, socio-cultural, 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, it is clear that a students' possession of financial and social capital greatly enhances their prospects of securing and then completing these experiences which 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 as a vehicle for reproducing privilege, power, and position (see also Martin, 2001).

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 also explaining how individuals have overlapping identities that impact how they are seen and treated (Crenshaw, 1991; Nunez, 2014). An intersectional perspective is relevant to the current topic of internships because it helps to explain how multiple obstacles may intersect and impact an individuals' life and opportunities, while also 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.

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 multi-faceted barriers to internship participation is essential, especially in this era of HIPs and an increasing focus on college and university campuses on student employability.

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, Goldrick-Rab & Broton, 2016; Woolf, 2008). 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.

References

Allen, K., Quinn, J., Hollingworth, S., & Rose, A. (2013). Becoming employable students and 'ideal'creative workers: exclusion and inequality in higher education work placements. *British Journal of Sociology of Education, 34*(3), 431-452.

Ashley, L., Duberley, J., Sommerlad, H., & Scholarios, D. (2015). *A qualitative evaluation of non-educational barriers to the elite professions.* London: Social Mobility and Child Poverty Commission.

Barnett-Vanes, A., Kedia, T., & Anyangwe, S. (2014). Equitable access for global health internships: insights and strategies at WHO headquarters. *The Lancet Global Health, 2*(5), e257-e259.

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, 70*(5), 9-49.

Blagg, K., & Chingos, M. (2016). *Choice deserts: How geography limits the potential impact of earnings data on higher education.* Urban Institute. Washington, DC.

Boulton, C. (2015). Under the cloak of whiteness: A circuit of culture analysis of opportunity hoarding and colour-blind racism inside US advertising internship programs. tripleC: Communication, Capitalism & Critique. *Open Access Journal for a Global Sustainable Information Society, 13*(2), 390-403.

Bourdieu, P. (1977). *Outline of a Theory of Practice (Vol. 16).* Cambridge university press.

Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood.

Cannuscio, C. C., Tappe, K., Hillier, A., Buttenheim, A., Karpyn, A., & Glanz, K. (2013). Urban food environments and residents' shopping behaviors. *American journal of preventive medicine, 45*(5), 606-614.

Coburn, C. E., & Penuel, W. R. (2016). Research–practice partnerships in education: Outcomes, dynamics, and open questions. *Educational Researcher, 45*(1), 48-54.

Crain, A. (2016). *Understanding the impact of unpaid internships on college student career development and employment outcomes.* Bethlehem, PA: NACE Foundation. Retrieved from National Association of Colleges and Employers website: https://www.naceweb.org/uploadedfiles/files/2016/guide/the-impact-of-unpaid-internships-on-career-development.pdf

Crenshaw, K. (1991). Mapping the margins: Identity politics, intersectionality, and violence against women. *Stanford Law Review, 43*(6), 1241-1299.

Cummins, S., Petticrew, M., Higgins, C., Findlay, A., & Sparks, L. (2005). Large scale food retailing as an intervention for diet and health: quasi-experimental evaluation of a natural experiment. *Journal of Epidemiology & Community Health, 59*(12), 1035-1040.

Cummins, S., & Macintyre, S. (2002). "Food deserts"— evidence and assumption in health policy making. *Bmj, 325*(7361), 436-438.

Curiale, J. L. (2009). America's new glass ceiling: unpaid internships, the Fair Labor Standards Act, and the urgent need for change. *Hastings LJ, 61,* 1531.

DiRienzo, D. F. (2016). Student perceptions of unpaid internships in the arts, entertainment, and media industry: A survey of lower income students' ability to participate in internships. (Doctoral dissertation). Retrieved from: https://fisherpub.sjfc.edu/education_etd/258/

Finley, A., & McNair, T. (2013). *Assessing underserved students' engagement in high-impact practices.* Washington, DC. Association of American Colleges and Universities.

Foulkes, I. (2015). How a UN intern was forced to live in a tent in Geneva. BBC News. Accessed at: https://www.bbc.com/news/world-europe-33893384.

Frenette, A. (2013). Making the intern economy: Role and career challenges of the music industry intern. *Work and Occupations, 40*(4), 364-397.

Harvey, A., & Reyes, K. (2015). Employability and equity: A comparative international analysis. R*esearch and Development in Higher Education: Learning for Life and Work in a Complex World*, 200-211.

Hillman, N. W. (2016). Geography of college opportunity: The case of education deserts. *American Educational Research Journal, 53*(4), 987-1021.

Knemeyer, A. M., & Murphy, P. R. (2002). Logistics internships: Employer and student perspectives. *International Journal of Physical Distribution & Logistics Management, 32*(2), 135-152.

Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter.* Washington, DC: Association of American Colleges and Universities.

Lin, N. (2001). *Social capital: A theory of social structure and action.* New York: Cambridge University Press.

Maelah, R., Muhammaddun Mohamed, Z., Ramli, R., & Aman, A. (2014). Internship for accounting undergraduates: comparative insights from stakeholders. *Education+Training, 56*(6), 482-502.

Martin, J. L. (2003). What is field theory? *American Journal of Sociology, 109*(1), 1-49.

Matsumoto, C. M. A. (2015). Internships in the communication discipline: Forging a pathway through the barriers (Doctoral dissertation).

McHugh, P. P. (2017). The impact of compensation, supervision and work design on internship efficacy: implications for educators, employers and prospective interns. *Journal of Education and Work, 30*(4), 367-382.

Milburn, A. (2009). *Unleashing aspiration: the final report of the panel on fair access to the professions.* London: Cabinet Office.

Murphy, D., Merritt, W., & Gibbons, S. (2013). Student and supervisor perspectives on the benefits of criminal justice internships. *Journal of Criminal Justice Education, 24*(2), 235-250.

Núñez, A. M. (2014). Employing multilevel intersectionality in educational research: Latino identities, contexts, and college access. *Educational Researcher, 43*(2), 85-92.

Nunley, J. M., Pugh, A., Romero, N., & Seals, R. A. (2016). College major, internship experience, and employment opportunities: Estimates from a résumé audit. *Labour Economics, 38,* 37-46.

O'Connor, H., & Bodicoat, M. (2017). Exploitation or opportunity? Student perceptions of internships in enhancing employability skills. *British Journal of Sociology of Education, 38*(4), 435-449.

O'Neill, N. (2010). Internships as a high-impact practice: Some reflections on quality. *Peer Review, 12*(4), 4-8.

Parks-Yancy, R. (2012). Interactions into opportunities: Career management for low-income, first-generation African American college students. *Journal of College Student Development, 53*(4), 510-523.

Perna, L. (2010). *Understanding the working college student: New research and its implications for policy and practice.* Sterling, VA: Stylus.

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods, 15*(1), 85-109.

Sackett, C., Goldrick-Rab, S. & Broton, K. (2016). *Addressing housing insecurity and living costs in higher education.* U.S. Department of Housing and Urban Development, Office of Public Development and Research. Washington, D.C.

Shade, L. R., & Jacobson, J. (2015). Hungry for the job: gender, unpaid internships, and the creative industries. *The Sociological Review, 63,* 188-205.

Solorzano, D. G., & Yosso, T. J. (2001). From racial stereotyping and deficit discourse toward a critical race theory in teacher education. *Multicultural Education, 9*(1), 2-8.

Sutton Trust. 2014. Internship or Indenture. Research Briefing, November 2014. Accessed November 13 2014. http://www.suttontrust.com/wp-content/uploads/2014/11/Unpaid-Internships.pdf

Taylor, S. G. (1998). Tracking the barriers: why don't more students do internships? (Masters Thesis, Montana State University-Bozeman). Retrieved from: https://scholarworks.montana.edu/xmlui/handle/1/733

Wawrzynski, M., & Baldwin, R. (2014). Promoting high-impact student learning: Connecting key components of the collegiate experience. *New Directions for Higher Education, 165*(2014), 51-62.

Webber, R. (2005). Integrating work-based and academic learning in international and cross-cultural settings. *Journal of Education and Work, 18*(4), 473-487.

CENTER FOR RESEARCH ON
College-Workforce Transitions

Wisconsin Center for Education Research
SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN-MADISON

The mission of The Center for Research on College-Workforce Transitions (CCWT) is to conduct and support research, critical policy analysis, and public dialogue on student experiences with the transition from college to the workforce in order to inform policies, programs, and practices that promote academic and career success for all learners.

Center for Research on College to Workforce Transitions (CCWT)
1025 West Johnson Street, Madison, WI 53706
For more information contact Center Director Matthew T. Hora (hora@wisc.edu)
ccwt.wceruw.org