
# Results from the College Internship Study at University of Baltimore

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The College Internship Study

## EXECUTIVE SUMMARY

This report includes preliminary findings from the first round of data collection at the University of Baltimore for *The College Internship Study,* which is a mixed-methods longitudinal study of internship programs run by the Center for Research on College-Workforce Transitions (CCWT) at the University of Wisconsin-Madison (UW-Madison). The study includes an online survey of students in the second half of their academic programs (n=228), focus groups with students who have and who have not had an internship experience (n=24), interviews with career coaches and faculty (n=8), and interviews with an area employer involved in internship program administration (n=1). The first stage of data collection occurred in the Spring of 2019, which will be followed by a second round of data collection in the Spring of 2020.

The research questions guiding this study focus on how stakeholders conceptualize and define the idea of internships, participation rates by certain demographic characteristics, and the relationship between internship program structure and student outcomes. Some key findings from our analysis of the data include:

- Students and educators considered internships to be associated with "experience," "careers," and "learning," and both also listed "unpaid" among the top five, although the students considered the concern with being "unpaid" to be more salient than the educators;
- Twenty six percent of the respondents to our survey had participated in an internship program within the past year (n=60), which also means that 74% (n=168) did not take an internship;
- Of the students who had taken an internship, 43.9% were in programs that did not require an internship while 40.8% reported that internships were required to graduate;
- Participation in internships was not correlated with many of the demographic variables measured in our survey, such as gender, race, first-generation student or disability status. However, students with a higher GPA, full-time academic enrollment status, part-time employment or no employment were more likely to have participated in an internship. Internship participation also significantly varied across academic programs;
- Sixty three percent (n=106) of students who did not take an internship had wanted to do so. Barriers to participation in internships included a need to work at a current job (67.9%), a heavy course load (64.2%), a lack of internship opportunity (49.1%), insufficient pay offered (47.2%), a lack of transportation (27.4%), and a lack of

childcare (18.9%). Focus group participants also reported several barriers to their participation in internships, including financial considerations, scheduling problems, transportation, and difficulties finding an internship;

- Several features of internship program structure are strongly associated with student satisfaction, including: supervisor support, supervisor mentoring, and the goal clarity of work tasks. Additionally, the internship's relatedness to academic program and similarity to an entry-level job are associated with students' perception that the internship helped to develop their academic knowledge and career development.
- Career adaptability, a psychosocial resource for individuals to manage career-related challenges and changes, was significantly associated with students' internship satisfaction and perceived developmental values.
- While outcomes such as employment status and wages will be studied over the next 12 months, short-term outcomes of participating in an internship program include the opportunity to explore one's career interests, to gain real-world experience, professional skills, and self-confidence, to cultivate professional networks, and to boost one's resume and obtain post-graduation employment.

This report concludes with recommendations for specific strategies that students, faculty and staff at the University of Baltimore, and employers who supervise interns, can take to increase participation rates, access, and program quality for internship programs in the Baltimore metropolitan area.

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# I. INTRODUCTION: Why study college internships?

Internships are widely perceived as important co-curricular experiences that can enhance student learning and facilitate their transition to the workforce. Advocates argue that through internships, students can develop new skills and abilities by transferring academic knowledge to real-world tasks, explore different career options, develop new professional networks and even obtain full-time employment. At the same time, employers can use internship programs to develop a pipeline of new recruits that can be vetted on the job for future employment, and postsecondary institutions can increase their students' career prospects and real-world experiences. Given these potential outcomes, internships are often described as a "win-win-win" situation for higher education, employers, and students themselves. Furthermore, internships have been designated as a "high-impact" practice that improves student outcomes (Kuh, 2008; Parker, Kilgo, Sheets & Pascarella, 2016), leading many state governments, colleges and universities, and workforce development boards to promote internship programs as a desirable solution to regional education-to-employment problems.

However, the research literature clearly indicates that internships are neither easy to design and implement, nor are they a panacea for the long-standing problems of cultivating students' skills and easing their entry into the labor market (Hora, Wolfgram, & Thompson, 2017). Access to internships themselves can be difficult, particularly for low-income, first-generation students who may be unable to engage in unpaid labor and/or lack social networks that facilitate participation in internship programs. Furthermore, while internships can provide a rich, experiential learning opportunity for students, long promoted by education theorists and learning scientists (e.g., Dewey, 1938; Resnick, 1987), designing a robust learning experience within an internship is much easier said than done. Not all internship experiences are designed and implemented with attention to best practices in the field, which could be due to a lack of knowledge about internships, adequate human and financial resources, or institutional capacity and supervisory expertise at the college or internship-site.

Despite these challenges of access and program quality, policymakers and educators view internships as a potentially important and influential component of students' education and career development. But before the potential of internships can be fully realized, it is necessary to first document the current state-of-affairs at the institutional level, so that future planning can be based on rigorous evidence. For instance, data on student participation and experiences with internships as well as the perspectives of career services staff and employers can be used to: (1) identify strengths and weaknesses in current programming, (2) establish a baseline for long-term analysis of program quality and impacts, and (3) inform decision-making about future program development and resource allocation.

In early 2018, the Center for Research on College-Workforce Transitions (CCWT) at University of Wisconsin-Madison launched the College Internship Study as a translational research program that could provide key stakeholders with robust, actionable evidence about internship programs. Since in-depth data on internships tend to be difficult to access, our aim in this study is to provide institutional leaders, faculty and instructors, and career services professionals at University of Baltimore with rigorous data on issues related to internship program access and quality. In doing so, we place students' experiences and perspectives at the heart of the analysis while also attending to the critical issue of institutional capacity—two considerations that should guide decision-making about future policy and practice around internship programs.

## II. BACKGROUND: What does the research literature say about internships?

An extensive body of research exists on college internships across a variety of disciplines and countries, leading to a literature that is simultaneously robust and inconsistent (Hora, Wolfgram, & Thompson, 2017). One of the biggest challenges facing the field of internship research is the lack of clear and standardized definitions regarding internships in general, and the paucity of empirical research on the structure of internship programs themselves. Given their similarity with other co-curricular experiences like co-ops or practicums and the variability in internship program design with respect to factors such as duration and task quality in many studies it is highly unlikely that study participants are answering questions about their internships with a similar frame of reference in mind. The National Survey of Student Engagement (NSSE, 2018), for example, is an important source of information about college internships in the United States, but the survey item encompasses a diverse array of (undefined) experiences that can be interpreted in a myriad of different ways by survey respondents. Thus, claims based on NSSE data that internships are a high-impact practice that lead to student engagement and success (e.g., Kuh, 2008) should be interpreted with caution.

Furthermore, before claiming causal relations between particular programs and student outcomes, it is essential to first describe these variables and the mechanisms that may govern their relations (Loeb et al., 2017). Consequently, descriptive research on critical mediating factors such as "the structure and format of internships" is essential in order to avoid treating the internship experience like a "black box" that mysteriously transforms students into work-ready individuals (Silva et al, 2016, p. 704). Similarly, it is untenable to assume that all internships provide a robust experiential learning opportunity in the spirit of the types of hands-on learning envisioned by educational theorists (e.g., Dewey, 1938 and Resnick, 1987). As a result, research examining the specific structural features of the learning environment that comprise the internship experience is particularly needed to inform internship policy and practice (Cannon & Geddes, 2019).

In our study, we build upon promising lines of inquiry that examine important features of internship program structure such as compensation, quality of supervision, and task clarity. For instance, studies on the coordination between employers and academic programs have shown that the more internships are clearly coordinated with academic coursework, the more students will gain from the overall experience (Katula & Threnhauser, 1999; Narayanan, Olk, & Fukami, 2010). Another important factor in perceived internship quality and efficacy is the behavior of job-site supervisors. Active and meaningful supervisor support was found to positively impact business students' satisfaction with the internship experience (D'abate, Youndt, & Wenzel, 2009), and was also positively associated with job pursuit, satisfaction, and career development in a study of 99 students in an undergraduate management program (McHugh, 2016). Other program design features that have been associated with satisfaction and other student outcomes include the duration of internships (Murphy, Merritt, & Gibbons, 2013), the degree of student autonomy to design and perform tasks (Virtanen, Tynjala & Etelapelto, 2014), the clarity and variety of work tasks (Bauer et al., 2007; Beenen & Rousseau, 2010), and the presence of detailed feedback from both educators and employers (Rothman, 2007).

With respect to outcome measures, some of the most common effects of internship participation examined in the literature are those of students' employment status, employer demand, or students' perceived readiness to enter the labor market (e.g., Baert, Neyt, Siedler, Tobback, & Verhaest, 2019; Jung & Lee, 2017; Nunley, Pugh, Romero, & Seals, 2010; Powers, Chen, Prasad, Gilmartin, & Sheppard, 2018; Weible & McClure, 2011). While these long-term outcomes of internships are important, another effect of experiential and work-based learning is the development of students' psychological resilience and self-concept (Callanan & Benzing, 2004; Paulson & Eugene Baker, 1999; Taylor, 1988). A concept in vocational psychology that is particularly salient for college students in a labor market that increasingly features short-term contract work and frequent job switching is that of career adaptability, or the psychosocial capacity and skills to continuously adapt, persist, and self-manage one's career tasks, transitions and personal traumas (Savickas, 1997, 2005), which is a psychosocial variable examined in our study.

Finally, career advisors and postsecondary educators are increasingly concerned about the problem of access, particularly for low-income, first-generation students who may be unable to engage in unpaid labor and/or lack transportation, child-care, or social networks that facilitate participation on internship programs (Curiale, 2009; Finley & McNair, 2013; Perlin 2012). Additionally, internship opportunities in rural areas and for students in certain fields (e.g., arts and humanities) may be limited, further exacerbating the access problem that may afflict students in many or our nation's colleges and universities.

## III. METHODOLOGY

*The College Internship Study* is a mixed-methods longitudinal study of internship programs that is guided by the following research questions: (1) How do students, educators, and employers conceptualize the idea of an "internship"? (2) Does participation in internships vary by students' race, major, or socio-economic status? And, (3) To what degree are characteristics of internship programs associated with student satisfaction and students' perception of the value of the internship for their own career development?

The data collected for the study includes an online survey of students in the second half of their academic programs, focus groups with students who have and who have not had an internship experience, interviews with individuals (e.g., career coaches, faculty, and area employers) involved in internship program administration and implementation, and documents and online resources about internship programs and services at the institution. A team of trained researchers collected this data at the University of Baltimore in the Spring of 2019. The online survey was administered to 1250 students in the second half of their program (with the exception of students in education programs), and 228 completed the survey which resulted in a response rate of 18.24%. The survey included questions about student demographics, characteristics of internship programs, barriers to internship participation, and students' career adaptability (i.e., a psychological construct linked to positive vocational outcomes). At the conclusion of the survey, 24 students volunteered for focus groups, which lasted approximately 45 minutes each, included between 1 and 3 students, and included more in-depth questions about experiences with and barriers to internships. In addition, 8 educators and 1 employer participated in an hour-long interview regarding his/her own experiences administering internships (see Table 1).

**Table 1: Description of Spring 2019 sample**

| | Survey | Focus Groups | Interviews |
|---|---|---|---|
| **Students** | 228 | 16 (n=24 individuals) | N/A |
| **Educators** | N/A | N/A | N/A |
| Faculty/instructors | N/A | N/A | 6 |
| Career advisors | N/A | N/A | 2 |
| **Employers** | N/A | N/A | 1 |

The data reported here represent the first phase of data collection at University of Baltimore (Time 1). Data will also be collected in the Spring of 2020 (Time 2), and will include a follow-up survey of students who responded to the T1 survey, which will represent a panel of students to track as they enter the workforce. Interviews will also be conducted with a sub-sample of these students, and also educators and employers in order to assess the nature of internship programming and/or effects over time.

**Table 2: Description of student sample**

| | Survey Sample | Institutional Population |
|---|---|---|
| Total | 228 | 1250 |
| Gender | Male = 83 \| 36.4%<br>Female = 141 \| 61.84% | Male=39.15%<br>Female=57.41% |
| Race | Asian = 14 \| 6.58%<br>Black = 96 \| 42.11%<br>Hispanic = 15 \| 6.58%<br>White = 79 \| 34.65%<br>Multi-racial = 15 \| 6.58%<br>Others = 8 \| 3.07% | Asian=4.56%<br>Black=45.56%<br>Hispanic=4.48%<br>White=34.11%<br>Multi-racial=4.80% |
| 1st gen status | Yes = 100 \| 43.86%<br>No = 128 \| 56.14% | Yes=N/A<br>No=N/A |

These data were analyzed using a variety of techniques, including qualitative analytic techniques such as inductive theme analysis of interview and focus group transcripts, saliency analysis of free-list terms; as well as quantitative analytic techniques such as descriptive analyses of survey responses, chi-square testing, Fisher's exact test of independence, logistic regression, and multiple regression analysis of survey data. In our study we advance no claims of causality among internship program participation and/or design features and student outcomes, but instead provide the type of descriptive research that must precede such empirical research and explore associations among these variables (Loeb et al, 2017). A more detailed description of our research methodology is included in Appendix A of this report.

## IV. RESULTS: Institutional capacity and procedures for administering internship programs

One of the goals of our research was to map the institutional routines in place regarding how internship programs are designed, implemented, and monitored. This kind of diagnostic assessment provides a "road map" of the five Ws—where, who, what, when, and why—of a program or initiative. Without such information at hand, it is difficult to ascertain precisely how programs like internships function within a complex organization, what (if any) kinds of mechanisms may be at work in shaping student outcomes, and where strengths and weaknesses exist that could be addressed in future programming. In the case of internship programs, which are often not administered through a centralized unit (e.g., a single career services office) but are managed by multiple parties across (and even outside of) campus, this type of diagnostic mapping is even more important. At University of Baltimore we collected information on these issues from interviews with faculty and advisors, along with an analysis of online and hard-copy documents.

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Similar to this map of the institutional capacity, companies that provide training and consultation services for employer internship programs (such as Intern Bridge, www.internbridge.com), provide support for organizations to audit their own resources, processes, and desired outcomes for their internship programs. Such an exercise is important to confirm that the organization's resources are aligned with the goals of their internship program.]

## Are internships required to graduate from the University of Baltimore?

The University of Baltimore Internship Engagement Report (2017-2018) documents that 142 undergraduate students earned academic credit for their internships in 12 internship courses across the university. Of these, 5 programs require an internship for graduation—Community Studies and Civic Engagement, Criminal Justice, Health Systems Management, Health Services Administration, and Integrated Arts—but several of these programs allow students to apply for a waiver of the requirement based on previous work experience. In addition, 4 of courses listed are required capstone courses, and one of the options for those courses is to do the internship. Digital Communications had required an internship for graduation which they changed because the full-time work and family responsibilities of their nontraditional students made an internship prove impossible. This reflects a more general concern with requiring internships for graduation for nontraditional students, as an educator cautioned, "… there will be a serious issue with non-traditional student persistence if we require internships" for all students, because of their work and other responsibilities. Several programs such as Information Systems and Technology Management and some of the programs in the business school do not require an internship but highly recommend the practice to their students. There is considerable variation across the campus in terms of the requirements, as explained by one educator, "UB still does not have any sort of formalized internship process. No one owns internships. So there are a handful of majors that may require internships, but again, each college handles those separately…."

## Who is in charge of administering internship programs?

Internship programing at University of Baltimore is fairly decentralized across the institution, with internships supported by individual faculty in departments and programs across the campus, and with various internship and career support services offered by the Career & Internship Center. Some faculty collaborate with the center to access resources to support their students' internships, while others work independently without coordinating with the center. In terms of staff who support designing and implementing internships at the center, there is the Director and three Career Coaches who offer career counseling, as well as a new Internship and Recruitment Coordinator, who focuses specifically on the center's efforts to support student internships. There is also an Assistant Director of Employer Relations who brings employers to campus for campus interviewing, visibility tables, and career fairs, both for internship and career positions. The center reports 1400 student appointments from 8/1/19 to 5/1/19, but this does not capture a larger portion of their services such as classroom presentations and special event support. Additionally, the center supports the online job and internship portal UBworks, which posted 404 internships by 231 organizations, viewed by students over 7,900 times in the 2017-2018 academic year.

## What is involved in the administration of internship programs?

The Career & Internship Center supports internships in several key ways; (1) by housing and supporting the UBworks database where external employers post over 2000 jobs and internships every semester to UB students; (2) by providing job search and internship search support to students via career coaching, resume review, and mock interviews; (3) by conducting presentations as requested by faculty on internship or career preparation; and (4) by hosting several career fairs, where students are able to connect with employers for internship and career purposes. Additionally, the Assistant Director of Employer Relations conduct outreach to local employers and community organizations, and the Internship and Recruitment Coordinator assists students in identifying placements for internships and collects data on the internship experiences on campus. The center is also pursuing an innovative initiative to provide training to community partners, such as the City of Baltimore, on how to supervise interns in ways that facilitate the students' learning and career development.

Faculty in programs with internship requirements and/or courses are also involved in a number of coordination activities with the student and the internship supervisor. This type of coordination can involve: (1) educating and formalizing an agreement on the expectations of the internship between the student, supervisor, and faculty; (2) having midterm or more frequent check-in meetings and a final end-of-internship evaluation meeting with the student and/or supervisor; and (3) assigning and evaluating a reflective writing assignment or other project for the student to process their experience.

### When do these activities take place?

While some fields have a typical timing for internships during the academic year (e.g., accounting internships may be during tax season), the majority of other programs find that they have interns participating year-round. While internship opportunities often become available during the academic year—depending on employers' needs—a number of students stated that they preferred summer internships, which they found easier to schedule because they were not enrolled in courses for the summer term.

### Why are personnel and organizational units involved in internship programs?

Many of the faculty and advisors who we interviewed for this study viewed their efforts to facilitate student internship experiences as an important and central aspect of their work; and they often described their motivation to support student internships in terms of the value the experience can provide to students, including helping students to make connections in their field, become excited about their career, expand their skills, and, as one educator explained, "Internships … solidify what you're learning in the classroom and give you practical experience but they also are a benefit to helping you enter a field."

## V. RESULTS: How do students, educators, and employers conceptualize the idea of an "internship"?

From our review of the research literature on college internships, the term internship is used to describe a variety of different programs and experiences, such that a standardized definition of the term did not exist in policy, research or practice (although there is a Department of Labor policy on what can be deemed an internship if it is unpaid, https://www.dol.gov/whd/regs /compliance/whdfs71.htm). Most commonly, the term was not defined at all in the literature and instead was presented as if a common understanding of the program's characteristics were known to all. Besides terminological confusion that inhibits comparability across studies, there is the related issue of not knowing what different parties think about when they hear the term "internship," or what cultural anthropologists call a "cultural domain" (Borgatti, 1994).

### Focus group and interview results: What do "internships" mean to different people?

In our study, we sought to document the specific ideas and phrases that students and educators associated with the term "internship," which sheds light on the assumptions and associations that social groups attach to an idea or phrase. This data was collected at the beginning of focus groups with students, and interviews with educators.

**Table 3. Free-list results for term "internship" for students and educators at University of Baltimore**

| Students (n=18) | | Educators (n=11) | |
|---|---|---|---|
| Term | Salience | Term | Salience |
| Experience | 0.452 | Learning | 0.434 |
| Career | 0.401 | Experience | 0.414 |
| Unpaid | 0.299 | Mentorship/guidance | 0.398 |
| Learning | 0.293 | Career | 0.286 |
| Positive | 0.231 | Unpaid | 0.271 |
| Paid | 0.207 | College | 0.252 |
| College | 0.201 | Internship tasks | 0.283 |
| Opportunity | 0.156 | Real world | 0.143 |
| Connections | 0.125 | Practical application | 0.131 |
| Advancement | 0.123 | Negative | 0.114 |
| Internship tasks | 0.111 | Industry-specific | 0.111 |
| Future | 0.101 | Exploration | 0.1 |
| Low-value work | 0.101 | Internship location | 0.087 |
| Negative | 0.101 | Development | 0.086 |
| Real world | 0.085 | Opportunity | 0.086 |

Table 3 illustrates that students and educators both consider internships to be associated with "experience," "careers," and "learning." Both also listed "unpaid" among the top five, although the students considered the issue of compensation to be more salient than did the educators; and educators prioritized "mentorship/guidance." The term "positive," which encompassed positive phrases or words about internships, also made it onto this top five list for the students.

# VI. RESULTS: Which students are taking internships at the University of Baltimore?

In this section we present findings from the online survey and student focus groups regarding the number of students at University of Baltimore who have (and have not) participated in internships.

## Survey results: How many students are participating in internships?

One of the most fundamental questions facing research, policy, and practice on college internships is how many students are participating in these programs. Among our study sample (N=228) we found that 60 students (26.3%) took an internship in the past 12 months, with 38 students (63.3%) having only one internship experience and 14 students (23.3%) had two or three internships.

**Figure 1. In the past 12 months, have you participated in an internship?** (N=228)


These results indicate that a large number – approximately more than half of the study sample – have not had an internship experience, indicating that substantial growth in rates of internship participation is possible at the University of Baltimore. However, this result should be interpreted with caution, so that participation in internships is not viewed solely as an issue to be addressed by mandating them for graduation. Instead, participation should also be considered in light of other issues including barriers to participation for students (e.g., compensation), availability of employer hosts, and requirements of and relevance for individual academic programs.

## Survey results: Are there any demographic, life circumstance, psychological, or program characteristics that are associated with participation and non-participation in internship programs?

A wide range of factors may explain why a student elects to take an internship (or not), and understanding these factors is essential for institutional stakeholders who aim to improve access to these workplace learning experiences. In this section we report findings regarding differences in internship participation according to three categories: demographic variables (i.e., gender, race/ethnicity, first-generation college status, disability status, and parents' income), psychological variables (i.e., career adaptability), and features of academic programs (i.e., requirement to take internships).

### Demographic characteristics and internship participation

Little research exists on the relationship between participation in internship programs and demographic characteristics of college students. Given growing concerns about access to internship programs—particularly for students of color, low-income and first-generation students—we examined the issue of equitable access for all groups among University of Baltimore students who responded to our survey.

The results show similar participation rate for female and male students (see Figure 2, 26.5% vs. 27%). Most of the participating students are Black (42.1%) and White (34.6%), these two racial groups had similar internship participation rates (see Figure 3, 22.9% vs. 29.1%). First-generation students reported a relatively lower internship participation rate than continuing-generation students (see Figure 4, 22% vs 29.7%). Participation in internships was also analyzed for student respondents by disability status and parental income (see Figures 5 and 6). The relationship between internship participation and these variables was not statistically significant.

**Figure 2. Internship in the Past 12 Months (Yes/No), by Gender** (N=224)

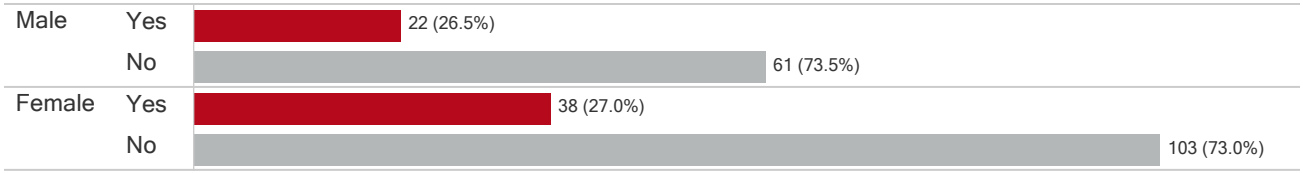
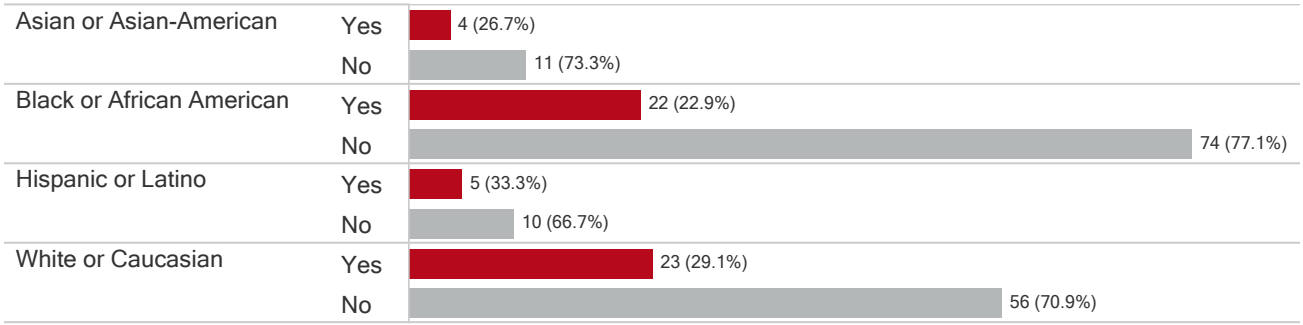



**Figure 3. Internship in the Past 12 Months (Yes/No), by Race / Ethnicity** (N=205)




Note: Foreign or nonresident alien, Two or More Races, and Others were excluded from this figure.

**Figure 4. Internship in the Past 12 Months (Yes/No), by First Generation College Student Status (FGS)** (N=228)

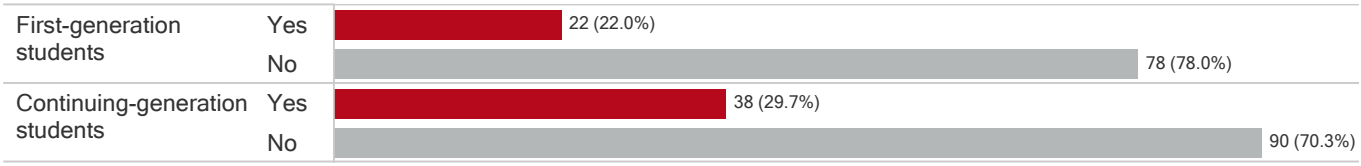



**Figure 5. Internship in the Past 12 Months (Yes/No), by Disability Status (DS)** (N=221)

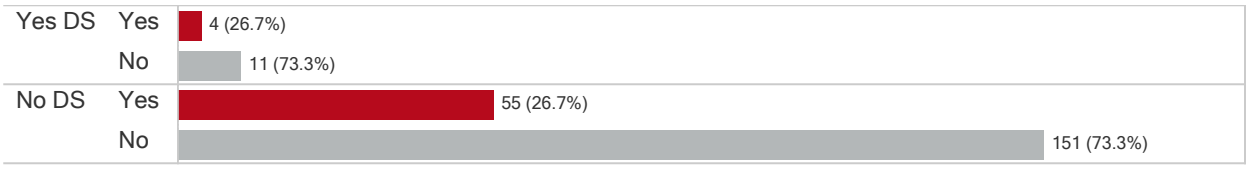
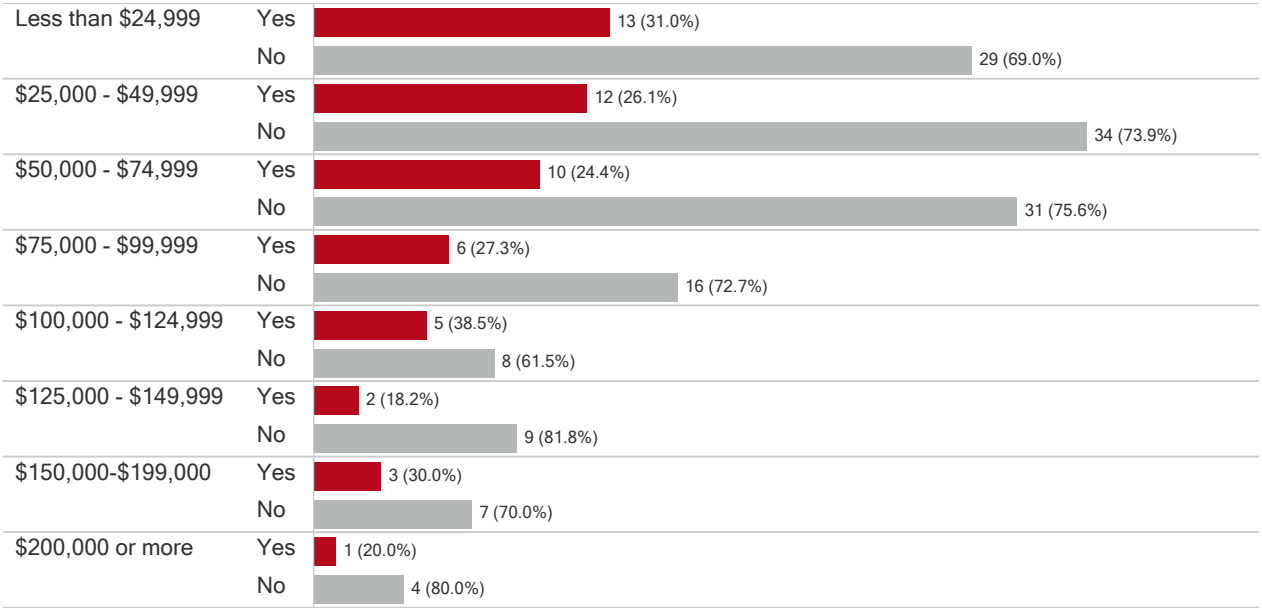


**Figure 6. Internship in the Past 12 Months (Yes/No), by Parental Income** (N=221)

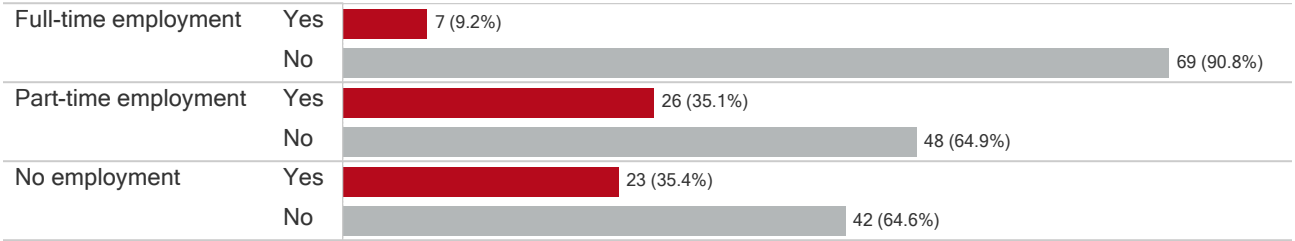



## Life circumstances and internship participation

Next, research on college affordability and students' basic needs has indicated that issues such as food insecurity, rising costs of college tuition, and related issues have a negative impact on student persistence and achievement (e.g., Maroto, Snelling & Linck, 2015). To examine these issues we report employment status, reliance on food assistance, challenges with the cost of housing, and skills and knowledge provided by current main job for the entire study sample. In addition, we also examine the relationship between these variables and internship participation.

Figure 7 displays employment status (PT/FT/No-employment) for those who work. For students who worked at a full-time job that is not an internship during the last 12 months, only 9.2% had an internship. For students who worked at part-time job and students who did not work for pay at a job, the internship participation rate was significantly higher, $\chi^2(2, 215) = 17.3$, $p < .001$.

**Figure 7. Internship in the Past 12 Months (Yes/No) by Employment Status** (N = 215)




Although we are using *p* value to infer statistical significance in the current study, it is worth noting that *p* value should not be taken as a definitive validation of relationships between variables. Many factors may influence *p* value such as effect size, size of sample and spread of the data (Dahiru, 2008; Ziliak and McCloskey, 2008), so *p* value does not necessarily preclude a cautious analysis of results based on survey data. *p* should be used as a warning signal on the possibility how likely it is that any observed difference between groups is due to chance.

Awareness about college students' challenges with securing adequate food, or what is known as food insecurity, is growing in the US (Broton & Goldrick-Rab, 2016). In our survey, we included a question asking if students had received free food or meals using the Supplemental Nutrition Assistance Program or a food bank, and the results indicate that for students who have and who have not had an internship, approximately 6.1% (n=18) reported relying on these resources in the past 30 days (see Figure 8). Given that housing costs can strain a students' financial situation, we also asked about problems with paying rent or mortgages, with 9.5% (n=22) of students reporting housing cost problems (See Figure 9). Due to the small number of students who reported these two constraints, we will not use the current data to infer their relationships with internship participation.

**Figure 8. Internship in the Past 12 Months (Yes/No) by Students Requiring Food Assistance** (N=228)

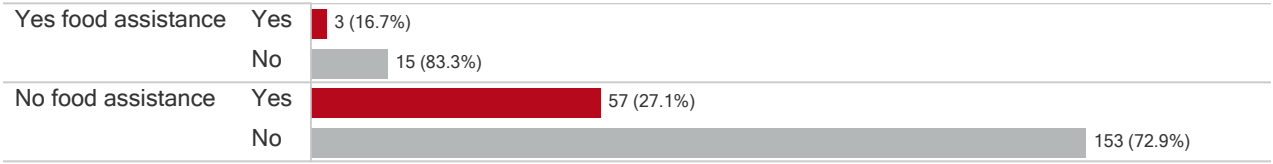
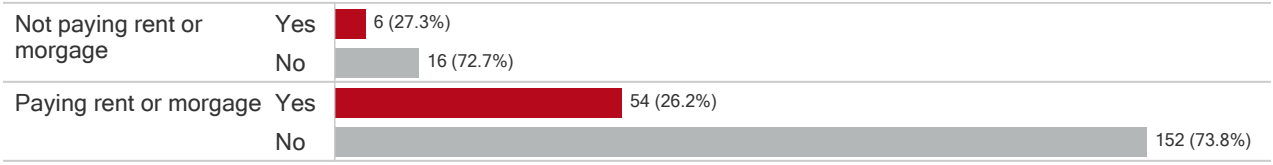



**Figure 9. Internship in the Past 12 Months (Yes/No) by Students Having Trouble Paying Rent or Mortgage** (N=228)

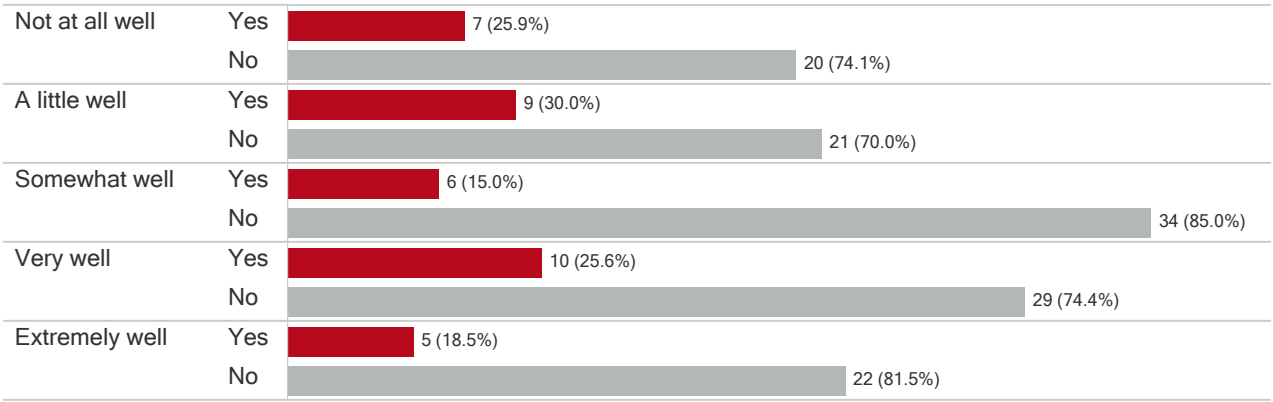



In addition to these potential constraints on internship participation, given that many students work part- or full-time, we explored whether or not their job was contributing to their career goals.

**Figure 10. How well do you think that your main job provides you with important work-related skills, knowledge, and abilities that you will need in your desired career?** (N = 163)

The results indicate that 40.5% of the students with a non-internship job felt that their main job was providing important career-related skills very well or extremely well. This result raises the prospect that for some students, their "main" paying job may in fact be providing career-relevant skills, albeit without the potential added benefit of close coordination with their academic program that some internships may provide. In addition, figure 11 shows that students who reported that their main job did not provide them with important career-related skills, knowledge, and abilities were more likely to participate in an internship. However, these differences were not statistically significant.

**Figure 11. Relationship between Internship Participation and How Well Current Job Provides Students with Important Skills in Desired Career** (N = 163)




## Psychological factors and internship participation

Research in counseling and vocational psychology indicates that psychological factors are also strongly related to a variety of career-related outcomes. For instance, career adaptability is a psychosocial resource that facilitates a person's ability to manage career-related tasks and changes (Savickas, 1997), which is significantly associated with one's adaptive behaviors (e.g., career planning, career exploration, self-efficacy), employability, vocational self-identity, and satisfaction regarding life, career, and school experiences (Rudolph, Lavigne, & Zacher, 2017).

In this study, we examined the relationship between career adaptability and internship programs, using a validated career adaptability survey developed by Savickas and Porfelli (2012). These survey items encompass four sub-scales including concern about the future, control over one's future, curiosity about different career options, and confidence to achieve one's goals, each of which are measured by six items that elicit how strongly the respondent rates themselves on these attributes. These items use a five-point Likert style set of response options (1=not strong; 5=strongest), resulting in a range of 6-30 for each sub-scale. Cronbach's alpha of the four subscales, using the current data, range from 0.87 to 0.94. To illustrate the types of questions that are included in the career adaptability survey, we report two examples from University of Baltimore dataset (see Figures 12, 13).

**Figure 12. Please rate how strongly you have developed each of the following abilities: Becoming aware of the educational and vocational choices that I must make** (N = 228)

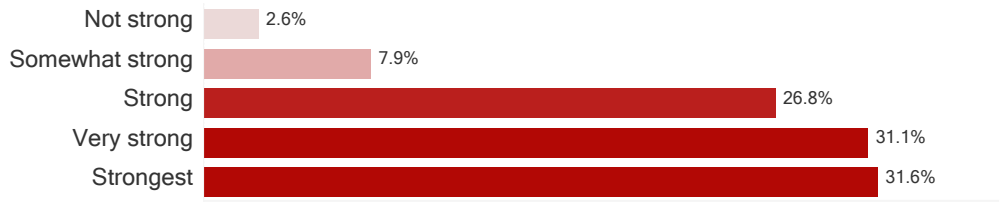
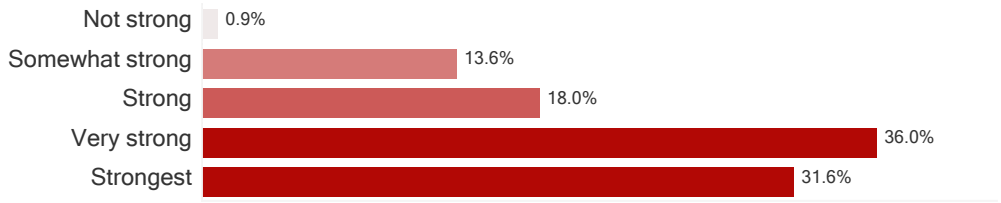



**Figure 13. Please rate how strongly you have developed each of the following abilities: Planning how to achieve my goals** (N = 228)




The results indicate that the survey respondents from the University of Baltimore rate themselves relatively highly across the career adaptability sub-scales: concern (M=3.87, SD=0.83), control (M=3.87, SD=0.80), curiosity (M=3.72, SD=0.84), and confidence (M=3.89, SD=0.79). Logistic regression analyses indicated no significant relationship between the composite career adaptability score and internship participation.

### Features of academic programs and internship participation

It is also possible that some features of a students' academic program and performance may be related to their participation in internships. Here, we examine the relationship between students' academic programs and students' participation in internship programs.

The results indicate that 40.8% of the respondents were in academic programs that required internships, who were more likely to participate in an internship than students who are not required to take an internship to graduate (33.3% vs. 25%, see Figure 14). In addition, 59.2% of the 228 survey respondents were full-time students and 40.8% were part-time students. Figure 15 shows that internship participation rate of full-time students (34.1%) was significantly higher than part-time students (15.1%), $\chi^2(1, 228) = 9.32$, $p < .001$.

**Figure 14. Relationship between Internship Participation and whether or not an internship was required to graduate from your academic program** (N=193)

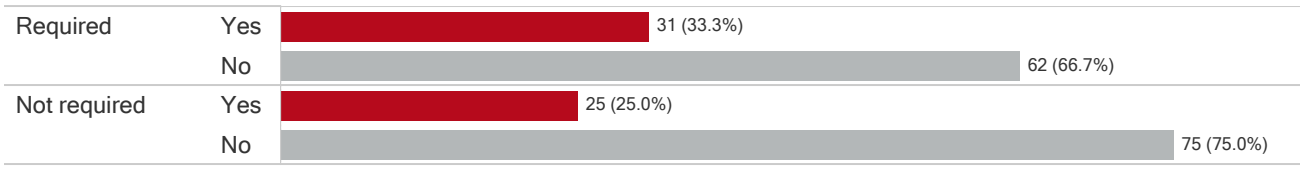
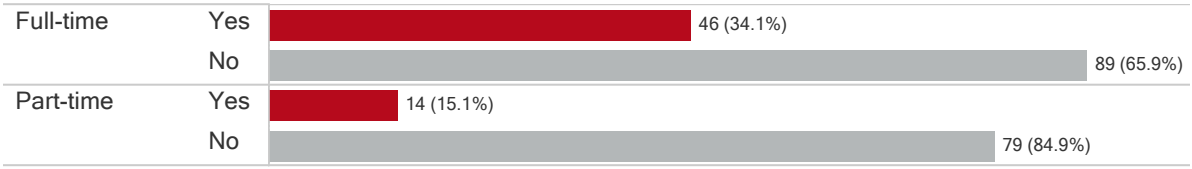
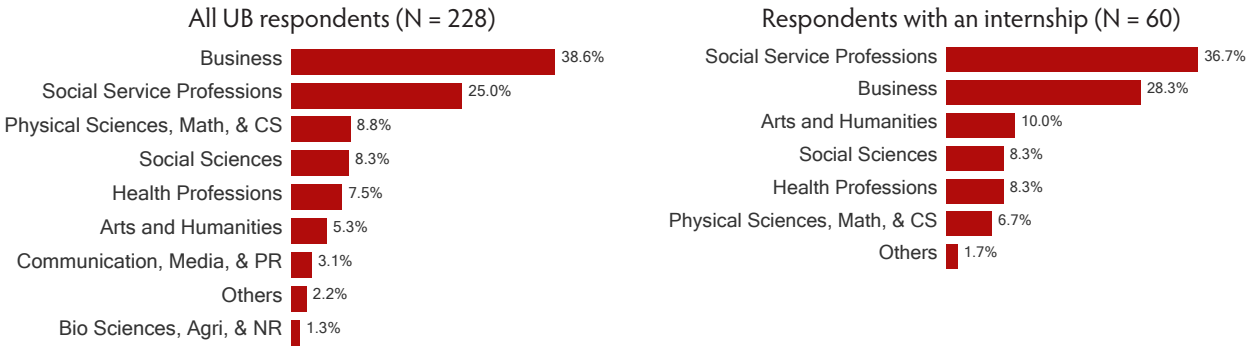


**Figure 15. Internship in the Past 12 Months (Yes/No) by Enrollment Status** (N=228)



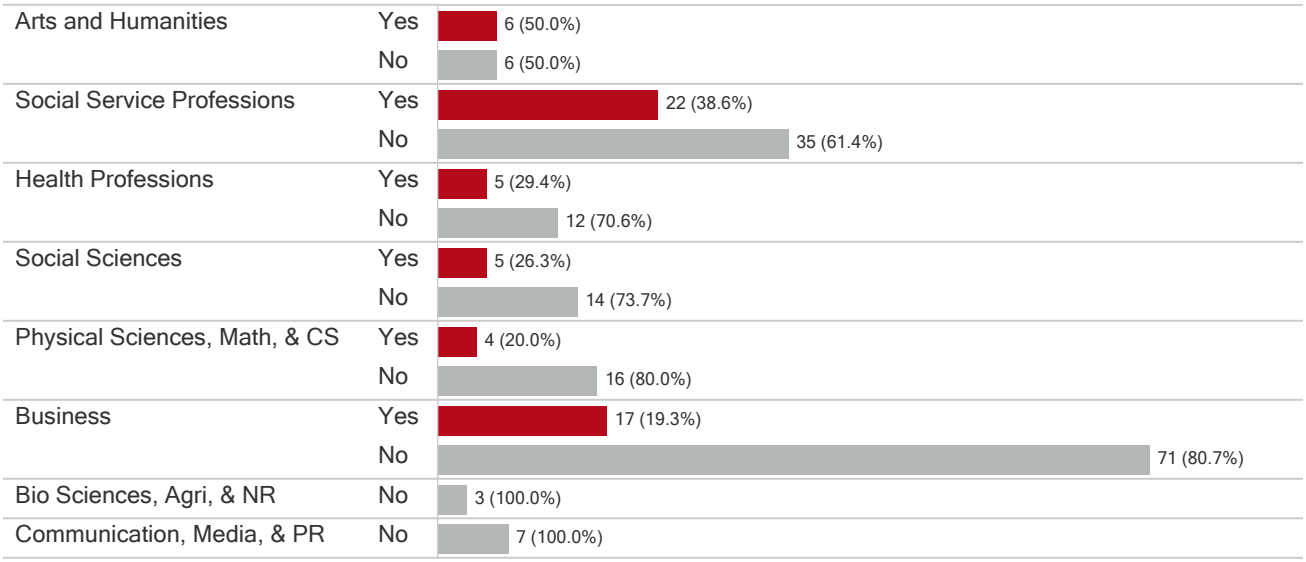

Additionally, we examined internship participation rates by disciplinary sectors instead of by individual departments. We adopted the major field categories defined by the National Survey of Student Engagement (NSSE, 2018). These results indicate that disciplinary sectors with the largest numbers of students with internships are Social Service Professions (36.7%) and Business (28.3%). A Fisher's exact test indicated that internship participation rates significantly differ across those program disciplinary sectors, $p$ =.049. Arts and Humanities has the highest participation rate (50%), followed by Social Service Professions (38.6%), Health Professions (29.4%), Social Sciences (26.3%), Physical Science, Math, and Computer Science (20%), Business (19.3%). None of the ten participants from Biological Sciences, Agriculture, & Natural Resources and Communication, Media, and Public Relations participated in an internship.

**Figure 16.1. Internship in the Past 12 Months (Yes/No) by Program Disciplinary Sector**



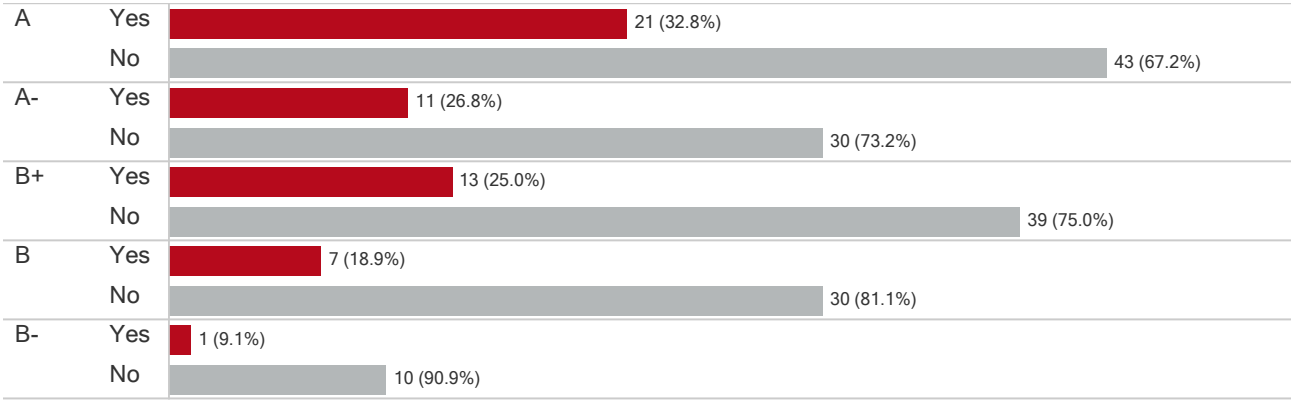

NR = Natural Resources; CS = Computer Science; PR = Public Relations

**16.2. Relationship between Internship Participation and Students' Program Sectors** (N=223)




Finally, we examined the relationship between participating students' grade-point average (GPA) and internship participation. A logistic regression analysis showed that higher GPA is associated with higher probability that one participates in an internship. The odds ratio is 1.3, which indicated that for every one unit increase in GPA, the likelihood that a student participates in internship increases by approximately 1.3 times. These results suggest that students with low GPAs (B- and below) may require additional support, encouragement, or assistance with securing an internship.

**Figure 17. Relationship between Internship Participation and Students' Grade Point Average** (N=205)




Note: C+, C and C- were excluded due to low frequency.

# VII. RESULTS: Barriers to participation in internships for University of Baltimore students

In this section we present findings from the online survey and student focus groups regarding barriers to participation in internships for students at the University of Baltimore. Who has access to internships and who does not is a critical issue with respect to the problems of inequality and social mobility that are facing higher education and society at large. Since internships may provide students with valuable social and cultural capital, and enhance their employability in the labor market, these barriers to internship participation should be viewed as one of many potential roadblocks that many students must contend with.

## How many students wanted to participate in an internship but could not? If not, why not?

For the 168 students who did not participate in an internship, 63.1% of them had wanted to do so (see Figure 18). We asked them to rank the various reasons from most important and least important for not pursuing an internship. Many students ranked their needs to work at current jobs (n = 42) and heavy course load at school (n = 26) as the most important reasons for not pursing an internship. In addition to a need to work at current jobs (n = 22), many students also ranked insufficient pay offered (n = 20) as the second important reason. Additionally, another 20 students ranked heavy course work as the third reason (see Figure 19.2). In general, 67.9% of students consider a need to work at current job as a barrier, 64.2% for a heavy course load, 49.1% for a lack of internship opportunity, 47.2% for insufficient pay offered, 27.4% for a lack of transportation, and 18.9% for a lack of childcare (See Figure 19.1). Improving our understanding of the barriers to participation in internships for this population is a critical issue facing our nation's colleges and universities.

**Figure 18. You indicated that you did not participate in an internship in the past 12 months. In the past 12 months, were you interested in participating in an internship?** (N = 168)


**Figure 19. In the past 12 months, why were you not able to pursue an internship?**

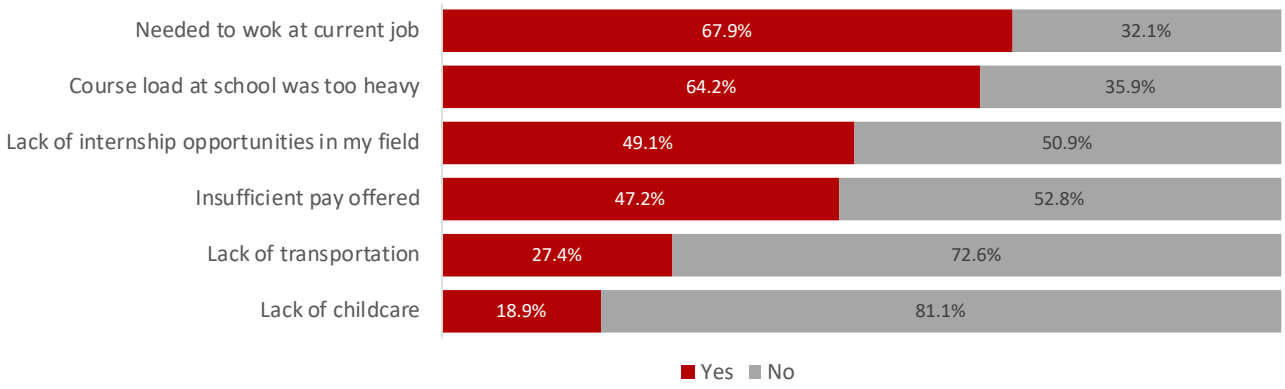
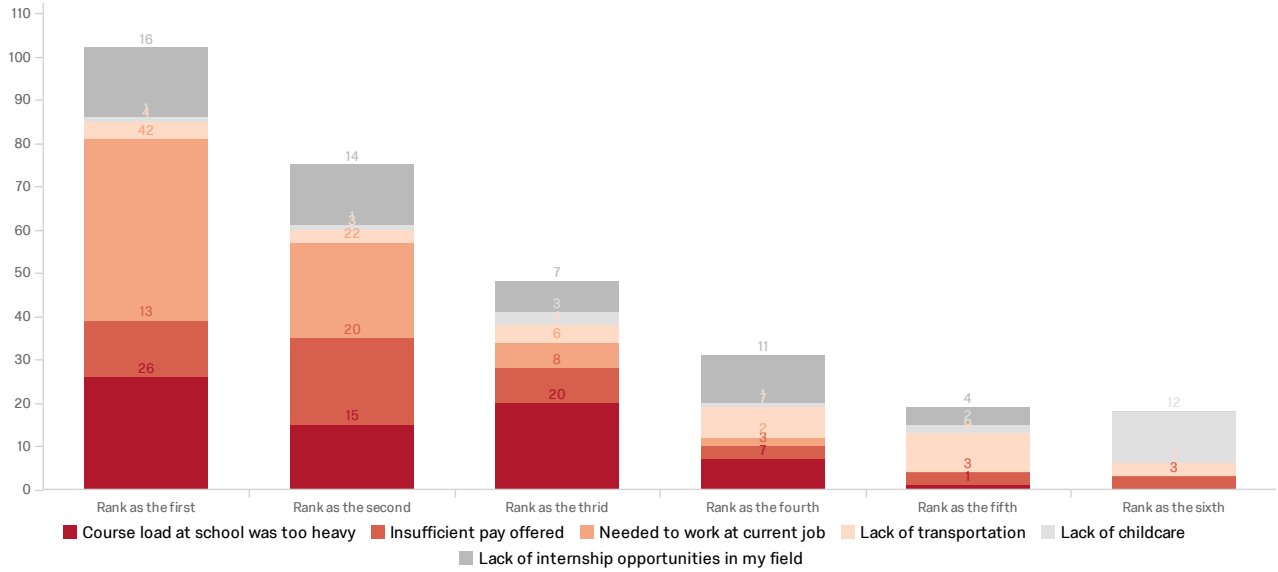


**Figure 19.2. Rank the reasons from most important to least important for not pursuing an internship.**




## Focus group: What were students' concerns and difficulties in participating in internships?

In addition to these results from our online survey, we held 16 focus groups with 24 students at University of Baltimore, and the students discussed their concerns and difficulties related to internship participation.

**Table 4. . University of Baltimore Student Concerns and Difficulties in Participating in Internships** (N=24)*

| Concern/Difficulty | Examples |
|---|---|
| Financial considerations | Issues with the need for financial stability, inability to take unpaid internships |
| Scheduling | Issues with scheduling internships to coordinate with paid work, academic coursework, and other responsibilities |
| Transportation | Issues around traveling or moving for an internship; living away from family, finding housing and living independently |
| Finding a host site | Issues with finding an internship, navigating the campus requirements, limited availability of internships by field; issues with internship tasks and relevance to their career trajectory |

*This sample includes all focus group participants from University of Baltimore; these difficulties include those that were discussed most frequently, in descending order of frequency

Students discussed several barriers to their participation in internships: financial considerations, problems scheduling internships with paid work and academics, transportation, and finding a host site (Table 4). Finances are a major consideration for students as to whether or not they can participate in an internship, particularly when considering an unpaid or inadequately paid internship. For some students, they are pursuing internships during the summer, when they are not in school, so they could continue to work for pay. Others had selected not to do an internship because of their financial obligations, as one student explained of the low-paying internships he found online, "They were paid, but I mean, it's not like my salary. You know, so, again, that's just not feasible either." Students with one or more jobs, academic coursework, and other responsibilities, sometimes opt to not participate in internships, even if they believe the experience to be beneficial to their career development; as one student explained:

> *Yeah. So my brother, I'm working with him. My brother's opening up a pizza store, so I'm helping him work there on the weekends and nights. And during the weekdays, the days I don't go to college, I'm working at the bank. So I'm like balancing everything. I only work part-time at the bank, but it's just -- I could take that off the schedule and do an internship, but then it'd be like I wouldn't be getting paid at the bank. It's a decent pay compared to not getting paid at all. … I don't have the resources for an internship.*

This student believes that internships are "an important way to gain work experience"; but he also works two jobs, one to support his family's business (and the profit supports his aged parents), and the other job is for pay to support himself. Thus, in spite of the fact that he considers an internship to be a valuable and desired part of career preparation, he is unable to participate: "I don't have the resources for an internship." Another student was concerned that if she decreased her hours at her paid job in order to do an internship, she would put her future job security at risk; and she could ill afford to lose her job where she had dedicated years of service and had become a manager, earning what she considered to be a good wage. Lastly, although not common among our focus group participants, a few student mentioned that they could access additional financial support from their parents so that they could participate in an internship.

Students also discussed the challenge of internship scheduling, which requires coordinating the internship with needed paid work, academic coursework, and other responsibilities. This obstacle can be insurmountable for nontraditional, working students who may work full-time in jobs with inflexible scheduling. One such student explained how she was unable to apply for an internship for which she was qualified, on account of the scheduling constraints:

> *I'm a full-time worker. I work for the State of Maryland and I've just noticed that the internships presented are like maybe in the summertime, 40 hours a week, in which it just doesn't fit with my full-time schedule. … So, recently they put out something for like a summer internship in which, you know, I qualified, but it was 40 hours a week. These are like regular, normal business hours, nine to five, eight to four, which I just, I just can't do.*

Other students echoed this challenge of scheduling class time, study time, and time for paid work, "… [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." In addition to the scheduling demands of paid work and academic coursework, students also mentioned needing to schedule family responsibilities, such as taking care of elder or sick family members or caring for dependent children.

Transportation to internships was another concern that students expressed, particularly for a number of students who did not own or have regular access to a dependable car. And such students also felt that the Baltimore public transportation system was unreliable, time-consuming, and, in some cases, unsafe, particularly for traveling in between the city and the suburban hinterland. In one focus group, all three participants expressed the same concern, and were actively looking for internship opportunities that were either near home or near campus, and had chosen not to apply for internships for which transportation would be a barrier.

Lastly, some students struggle to find internships that were relevant to their field or career trajectory. As one student explained,

> *… if I just put in psychology and internships and whatever else [into the UBworks search tool], stuff will come up but nothing in Baltimore. Until I put in a location—then boop!—everything went down from 100 to zero.*

Other students mentioned this challenge of finding internships related to their academics, however, some of these students may be searching for internships using too narrow search criteria, focusing on their specific academic program rather than more broadly on their academic and career interests. One student, for example, was frustrated that there were no internships designated for her specific interdisciplinary business major—although there were many internships listed that were relevant to marketing, entrepreneurship, business administration, accounting, finance, and so on (this student was exploring UBworks independently, without the help of a career advisor).

## VIII. RESULTS: What types of internships are students at University of Baltimore taking, and what are their experiences in them?

In this section we present findings regarding the types of internship programs that students at University of Baltimore have taken, and their experiences in and with the internship. After describing key features of students' internship programs from the survey data (e.g., organization type, sector, length, compensation), we then report how students described their internship with respect to characteristics that the literature suggests are associated with positive student outcomes and experiences (e.g., supervisor support, task clarity, etc.). Finally, we discuss students' observations about their internship experiences from focus group discussions.

### Survey results: Features of internship programs

For the 60 students at the University of Baltimore in our study sample that had taken an internship in the past year, 41.7% of them did so at a for-profit company, with the remainder at government agencies (23.3%) and non-profit organizations (35%). Many of these internships were concentrated in fields such as accommodation and food services (16.7%), arts (11.7%), Education services (11.7%), finance and insurance (10%), health care and social assistance (10%), and information (10%), etc.

**Figure 20. In what type of organization did you participate in this internship?** (N = 60)


As defined by the North American Industry Classification System (NAICS), the Information sector "comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data." More information on this sector is available at https://www.bls.gov/iag/tgs/iag51.htm

**Figure 21. In what industry or field was this internship in?** (N = 60)

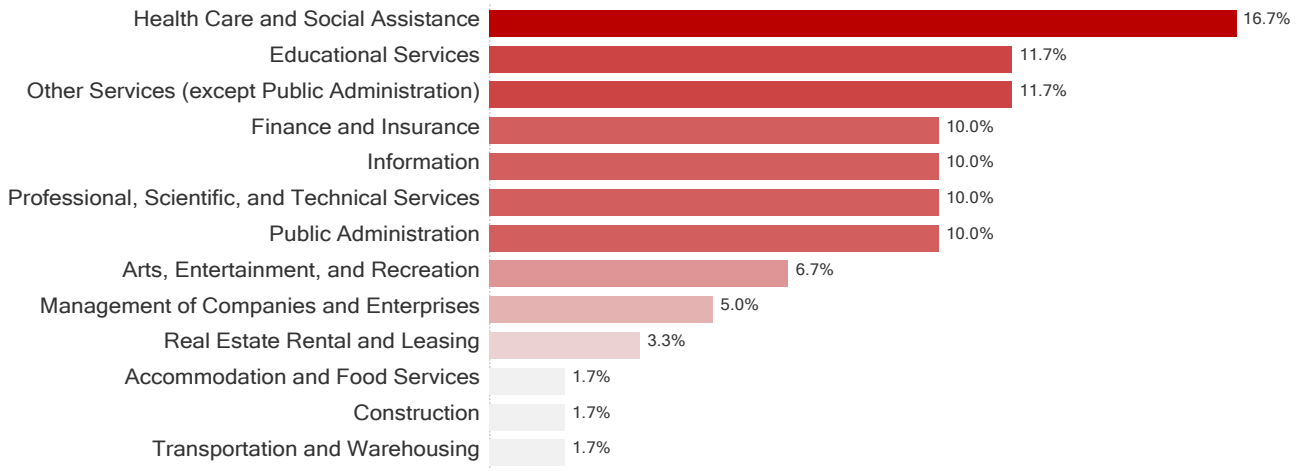



**Figure 22. For how many weeks did you participate in this internship?** (N = 60)

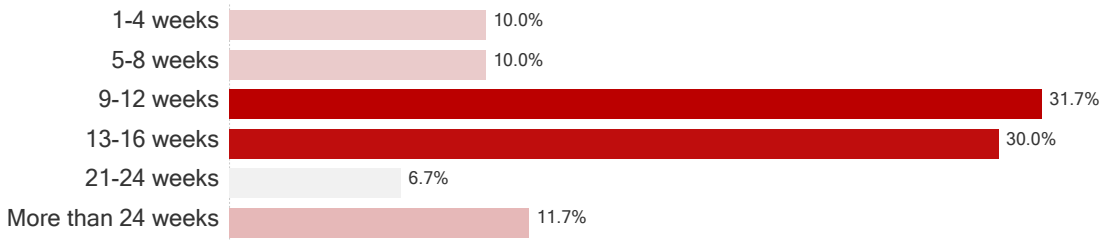
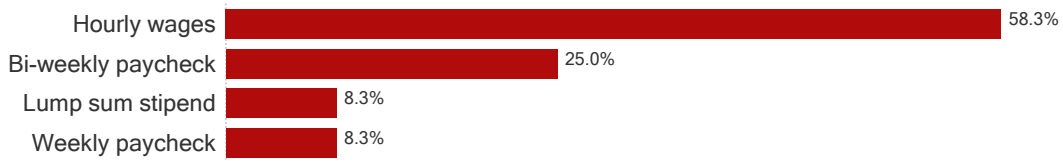



**Figure 23. Was the internship paid or unpaid?** (N = 60)


**Figure 24. Hourly compensation of internships** (N = 24)




These results indicate that the largest proportion of survey respondents who had taken an internship did so for 9-12 weeks (31.7%) and 13-16 weeks (30%), with other 20% participants having had an internship experience that lasted less than 9 weeks. Only 6.7% of students had an internship for 21-24 weeks and 11.7% for more than 24 weeks (Figure 22). Further, 40% of these students were compensated for their internship work, whereas 60% were not (Figure 23). More than half of the students (58.3%) were paid hourly. The average hourly payment is $17.50, which is above the estimates of living wages for one adult in Baltimore city ($13.69) (MIT Living Wage Calculator, 2018).

## Survey results: presence of internship characteristics associated with positive student outcomes

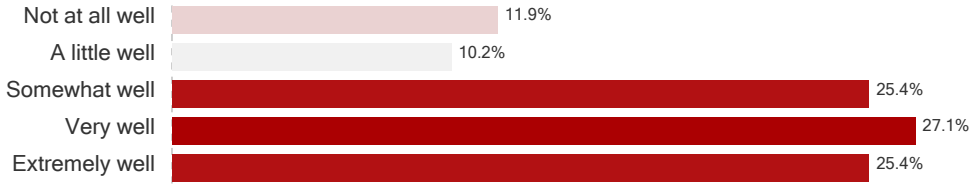
Next, we turn to one of the primary research questions driving this study: what is the structure and format of internship programs that University of Baltimore students are taking? Examining this issue, we focus on features of internships that the research literature suggests are associated with positive student outcomes.

### Link between academic program and internship

One of the core principles of experiential education is the integration of academic or theoretical concepts with opportunities to apply new knowledge in hands-on situations. Research on internships also indicates that close coordination between academic coursework and internship experiences is also linked to interns' satisfaction (e.g., Hergert, 2009). For University of Baltimore students who participated in an internship, 73.3% felt that their internship was very or extremely related to their academic coursework (Figure 25). In addition, 52.5% of the students reported that their academic program staff and internship supervisors cooperated very well or extremely well to ensure this integration (Figure 26). Here, we report results from the two questions focused on this topic.

**Figure 25. How related do you feel your internship was to your academic program?** (N = 60)


**Figure 26. How well did your internship site supervisor and your academic program staff coordinate with one another?** (N=60)




### Perceived supervisor support

Next, the literature also indicates that supervisors' active support of interns' career development and on-the-job satisfaction is strongly associated with positive student outcomes (McHugh, 2017). This construct was measured using four questions with a five-point likert scale from 1=Not at all to 5=A great deal (M=4.34, SD=0.89): 1) In this internship, how much did your supervisor care about your well-being? 2) In this internship, how much did your supervisor care about your satisfaction at work? 3) In this internship, how much did your supervisor appreciate the amount of effort you made? 4) In this internship, how much respect did you feel you received? Below we report results from two of these items as examples (see Figures 27 & 28). For University of Baltimore students who had recently taken an internship, 81.7% reported that their supervisors cared about their satisfaction at work quite a bit or a great deal, and 90% reported that their supervisors appreciate the amount of effort they made, important indicators of supervisory support (Figure 27).

**Figure 27. In this internship, how much did your supervisor care about your satisfaction at work?** (N = 60)

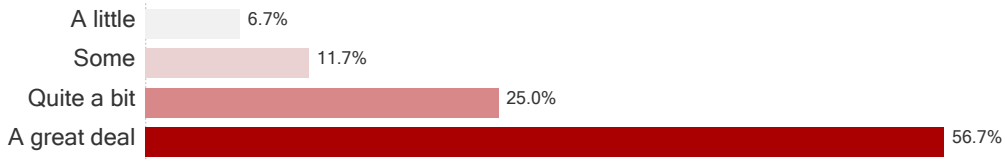
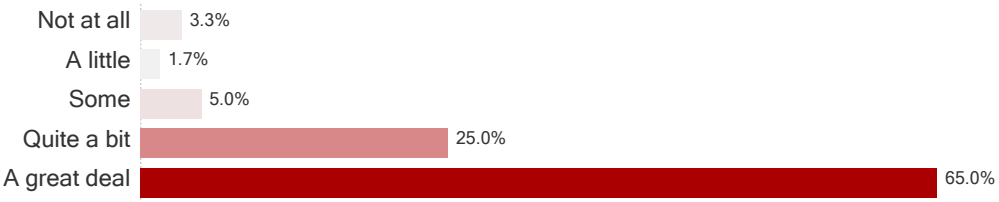



**Figure 28. In this internship, how much did your supervisor appreciate the amount of effort you made?** (N = 60)




## Supervisor mentoring

Another aspect of supervisor behavior found to be positively associated with intern satisfaction is supervisor mentoring, which pertains to the provision of direction and feedback about task performance and career planning. This construct was measured using five questions with a five-point likert scale from 1=Never to 5=Extremely often (M=3.70, SD=0.90): 1) How often did your supervisor suggest specific strategies for achieving career goals? 2) How often did your supervisor encourage you to try new ways of behaving in the job? 3) How often did your supervisor give you feedback regarding job performance? 4) How often did your supervisor give you assignments that presented opportunities to learn new skills? 5) How often did your supervisor help you finish tasks or meet deadlines that otherwise would have been difficult to complete? Below we report results from two of these items as examples. While many University of Baltimore students reported that most supervisors provided feedback sometimes, very often or extremely often (45%), it is concerning that nearly a quarter of the supervisors failed to encourage students to try new ways of performing tasks at the internship site and 6.7% of the students reported not receiving adequate feedback regarding their performance (see Figures 29 & 30).

**Figure 29. How often did your supervisor encourage you to try new ways of behaving in the job?** (N = 60)

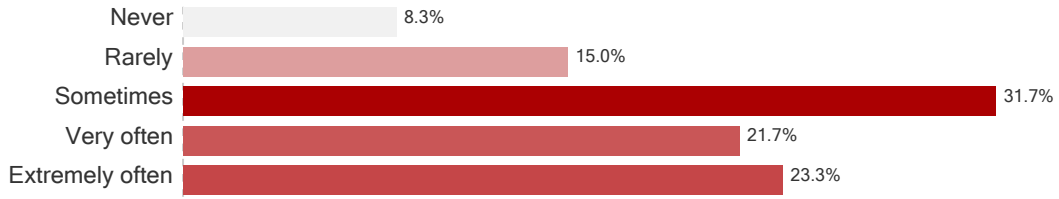



**Figure 30. How often did your supervisor give you feedback regarding job performance** (N = 60)

## Goal clarity

Clear expectations regarding work products and how they are evaluated is known as task goal clarity in the literature, and this feature of internships is associated with reduced stress and increased satisfaction on the job site (Beenen & Rousseau, 2010). For some internships that are poorly designed and lack meaningful work, students may end up working on ill-structured and poorly managed tasks (Frenette, 2013). This construct was measured using two questions with a five-point Likert scale from 1=Not at all clear to 5=Extremely clear (M=3.93, SD=0.90), and below we report results from these items (see Figures 31, 32).

The results indicate that 71.7% of participating University of Baltimore students taking internships felt that they were given very clear or extremely clear objectives and 70% of students felt that they received very clear or extremely clear explanation of what they need to accomplish, though the rest of the students who did not report such task goal clarity raise questions about the work that some students are being asked to perform in their internships.

**Figure 31. In this internship, how clear were the objectives you were given about what you needed to accomplish?** (N = 60)

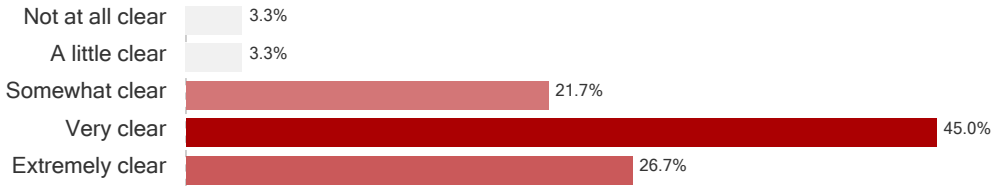



**Figure 32. In this internship, how clear was the explanation of what you needed to accomplish?** (N = 60)


## Task autonomy

Besides benefiting from clearly defined tasks, interns also report higher rates of satisfaction when given autonomy and discretion to perform the tasks assigned to them (McHugh, 2017). This construct was measured using two questions with a five-point Likert scale from 1=None to 5=A great deal (M=4.21, SD=0.94), and below we report results for these items (see Figures 33, 34). For University of Baltimore students, 78.3% reported having considerable flexibility in how they completed their work and 78% reported having much freedom to decide how to do their work, indicating that for these students the internship is an opportunity to function with autonomy in the workplace.

**Figure 33. In this internship, how much flexibility did you have in how you completed your work?** (N = 60)

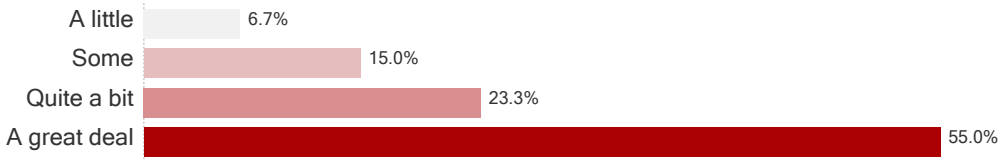
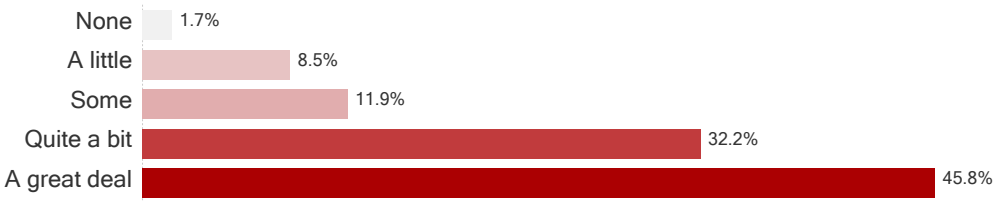


**Figure 34. In this internship, how much freedom did you have to decide how to do your work?** (N = 60)




## Task similarity to entry-level employment

Finally, one of the persistent questions in the literature is whether interns are provided with work that is of equal difficulty to entry-level employees (Hora, Wolfgram & Thompson, 2017). This construct was measured using one question with a five-point Likert scale from 1=Not at all similar to 5=Extremely similar (M=3.73, SD=1.04). The findings indicate 63.3% of the participating UB students considered their internship tasks were very similar or extremely similar to those in entry level employment. Answers to this question have implications for both compensation and the meaningfulness of the work itself. There were 11.6% of participating UB students considered their internships tasks not at all similar or a little similar to an entry-level employment (see Figure 35).

**Figure 35. During your internship, how similar in nature were your tasks to those in entry level jobs in the organization?** (N = 60)

### Focus group results: What were students' experiences with their internship?

**Table 5. University of Baltimore Student Experiences in Internships** (N=11)*

| | |
|---|---|
| **Relation to Academics** | |
| Highly Related | What was learned in class was employed at the internship; entered internship with the skills needed to succeed. |
| Somewhat Related | Standards and principles similar between courses and internship, but application in new area; needed to learn some additional techniques or skills |
| Not Related | Internship experience entirely separate; totally new skills, area of focus, or both. |
| **Supervision** | |
| Autonomous | Fully autonomous; worked on tasks separate from supervisor; limited training, guidance, or feedback on tasks |
| Semi- Autonomous | Supervisors present, provided feedback when necessary and training when needed but not on a regular basis. |
| Highly Supervised | NA—was not reported by students at the University of Baltimore. |
| **Mentoring/feedback** | |
| Lack of mentoring | Mentoring occurred infrequently or not at all. |
| Mentoring relationship | Mentoring occurred regularly, with a particular person who was designated to provide mentorship and advice. |
| Corporate mentoring | Mentoring was provided by various members of the professional staff |

Notes. *This sample only includes those University of Baltimore focus group participants who had internships

Students' experiences in internship during their time at the University of Baltimore varied in terms of the internship's relationship to academics, supervision, and the presence and quality of mentoring (Table 5). In terms of the internship's relationship to their academic coursework, most students felt that their internship experience was highly related; although there were a few who felt it was either somewhat or not related. Participants who felt that their coursework was related gave examples of skills or knowledge they had gained in class that they had applied in their internship. Students who stated it was less related discussed needing to learn technical skills for their internship, such as how to operate a particular software program.

Supervision ranged from interns being relatively unsupervised and highly autonomous, to being supervised but still semi-autonomous. On the unsupervised and highly autonomous end of this range, some students described themselves needing to identify work tasks without supervisor direction, or being "pretty much given free rein" over a project. On the supervised yet semi-autonomous end, students described being provided work tasks or a project, and the supervisor

was available to answer questions and provide feedback as needed. A few students also described more involved training and feedback at the start of the internship, which rapidly decreased as the intern was able to work independently. The participants in the focus groups did not report highly supervised internships, with daily, regular, or mandatory training sessions and meetings to provide directions and evaluations of the work.

There was also considerable variation in the presence and quality of mentorship experienced by students during their internships. There were students who described their supervisors as "always working directly with clients" or "too busy" or "too stressed" to provide mentorship; and in one case, a student believed that interns were hired to "fill a manpower shortage" at the organization but that supervisors did not have time available to provide mentorship to those interns specifically on account of that shortage. One student explained the impact of workplace time pressures on mentorship:

> *I wouldn't necessarily say … [my supervisor] was more of a mentor. Because he was busy with his stuff that he was doing too. Because he was working, so he didn't really have much time for me…. I would love that, you know, if I had someone I could really, you know, sit down and talk with.*

Other students described very high quality and supportive mentoring relationships with their supervisors or with other professionals at their internship site—involving open access to a mentor to ask questions, with supportive feedback on the work and advice on career preparation provided, and with regular opportunities to shadow mentors and attend team meetings. As one student explained, "there were certain people there [at the internship site] who were very adamant about showing me the things, the skills that would help me." Another student described that she "had the luxury of having one-on-one with her [mentor]" at an accounting firm, who took the time to walk her through a tax return involving a complicated retirement situation, "We sat down with that one return and we did it from beginning to end." Lastly, several students described a kind of corporate mentoring, receiving mentorship from numerous supervisors and professional staff at the internship site.

# IX. RESULTS: Outcomes of internships

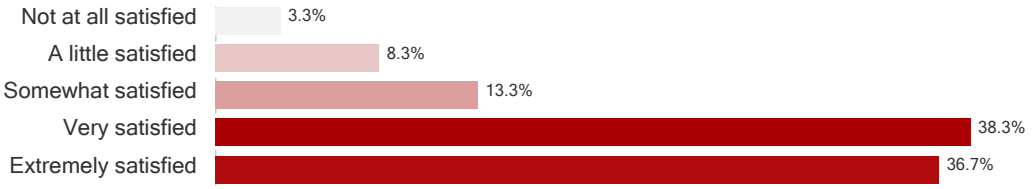
The impacts that internships have on students appears as one of the most important questions facing the field of higher education and workforce development, given their growing prominence in educational policy and programming. In empirical research on internships, this question is answered by tracking changes in variables such as employment status, wages, or vocational self-concept over time. In fact, our research team will be following the panel of students who participated in T1 of our study at University of Baltimore for at least one additional year, with these questions being addressed in the Spring of 2020. However, for this cross-sectional analysis of T1 data, we report outcomes in terms of satisfaction with the internship and student perceptions of how well (or poorly) the experience enhanced their knowledge, skills, and career aspirations.

## Survey results: Outcomes of internships

### Level of satisfaction with internship experience

An important indicator of the usefulness and impact of an internship experience is how students themselves perceive their experience. For this issue we asked a single question about overall satisfaction and asked students to rate from 1=Not at all satisfied to 5=Extremely satisfied (M=3.97, SD=1.07), and 75% of University of Baltimore participating students reported that they were very or extremely satisfied with their experience. The fact that 13.3% were only somewhat satisfied and 11.6% were not satisfied with their internship indicates that work remains to be done to improve internships for all students (see Figure 36).

**Figure 36. How satisfied were you with your internship experience?** (N = 60)




To investigate the relationship between internship program features and students' internship satisfaction, we conducted correlation and multiple regressions analysis. Please see Table 1 in Appendix B for the correlation and multiple regression results. The results indicate that supervisor support, mentoring, goal clarity, and similarity to an entry level employment positively and significantly correlate with students' perceived internship developmental value with coefficients ranging from .51 to .77. Relatedness to academic program is not correlated with internship satisfaction.

The multiple regression model with program features produces $R^2$= .74, F(15, 40) = 11.37, $p$ < .001. Supervisor support, supervisor mentoring, and goal clarity had significant positive regression weights, indicating students with higher scores on these variables were expected to have greater satisfaction, after controlling for the other variables in the model. Relatedness to academic program, autonomy, and similarity to entry level employment did not contribute to the multiple regression model. Finally, we can use this equation to compute predicted satisfaction scores: Satisfaction = 0.39 * supervisor support + 0.34 * supervisor mentoring + 0.38 * goal clarity.

### Developmental value of the internship experience

Next, we examine the impact of program structure on another important outcome of internships – students' perception of how much their internship experiences have influenced their academic learning and career development (i.e., developmental value). This Developmental Value scale was developed based the work by McHugh (2017) and Nghia & Duyen (2019), which consists of 11 items of two subscales using a 5-point scale from 1=none to 5=a great deal: a) developmental value of academic learning with 6 items (M=3.83, SD=0.89); b) developmental value on career development with 5 items (M=3.75, SD=0.83).

The first subscale was measured using five items: 1) The internship gave me opportunities to consolidate the knowledge that I have learned in my college coursework. 2) The internship gave me opportunities to apply knowledge from my coursework to real-world situations. 3) The internship gave me opportunities to identify academic knowledge gaps that need to be filled. 4) The internship helped me recognize what I should focus on studying in my program. 5) The internship motivated me to change from theory-focused to practice-focused learning.

The second subscale was measured by six items: 1) The skills I learned at this internship are important for my career development. 2) The internship helped me clarify my career objectives. 3) The internship gave me opportunities to learn new information or skills. 4) The internship offered me an opportunity to secure a job prior to my graduation. 5) The internship helped me identify some companies where I can apply and get a job. 6) The internship increased my beliefs about my abilities to pursue future career opportunities. We report below the results from the two items of each subscale as examples (see Figures 37-39). For example, the findings indicate 65% of the University of Baltimore participating students considered their internships providing "quite a bit" or "a great deal" of opportunities for them to apply knowledge from course work to real-world work; and 63.3% reported internships are valuable in terms of providing "quite a bit" or "a great deal" of opportunities for them to identify academic knowledge gaps. In addition, when reflecting the value of the internship to career development, 81.7% of participating UB students valued the skills they learned at internships are "quite a bit" or "a great deal" important for their career development, and 71.6% reported that their internships helped clarify their career objectives "quite a bit" or "a great deal".

**Figure 37. The internship gave me opportunities to apply knowledge from my coursework to real-world situations.** (N = 60)


**Figure 38. The internship gave me opportunities to identify academic knowledge gaps that need to be filled.** (N =60)

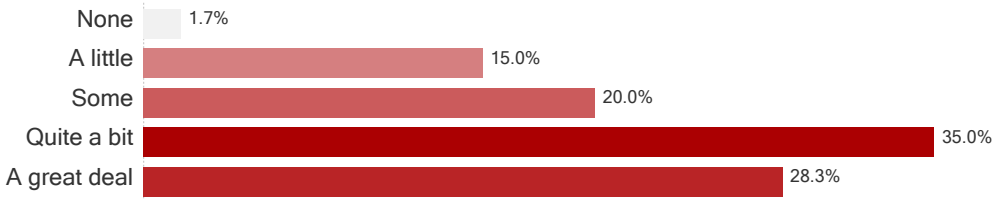



**Figure 39. The skills I learned at this internship are important for my career development.** (N = 60)

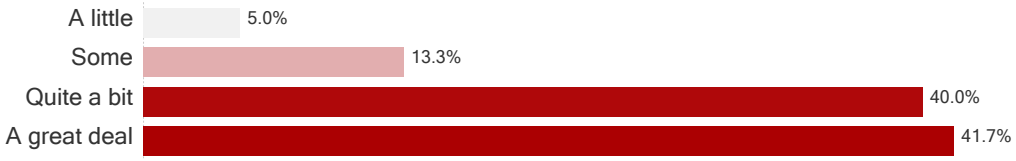
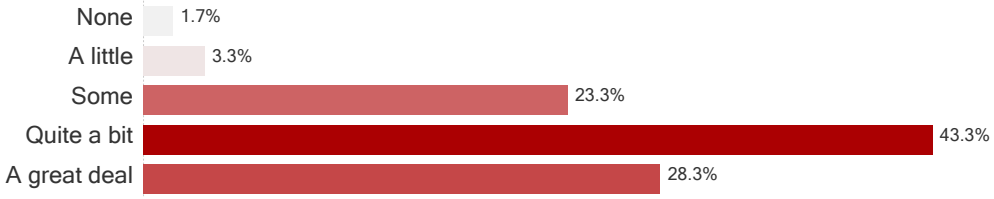



**Figure 40. The internship helped me clarify my career objectives.** (N = 60)




To investigate the relationship between internship program features and students' internship satisfaction, we conducted correlation and multiple regressions analysis. Please see Table 2 in Appendix B for the correlation and multiple regression results. The results indicate that supervisor support, mentoring, goal clarity, autonomy, relatedness to academic program, and similarity to entry level employment positively and significantly correlate with students' internship satisfaction with coefficients ranging from 0.35 to 0.63.

The multiple regression model with program features produces $R^2 = .43$, $F(15, 40) = 15.11$, $p < .001$. Relatedness to academic program and similarity to an entry-level job had significant positive regression weights, indicating students with higher scores on these two variables were expected to perceive a higher level of developmental value of their

internship experience, after controlling for the other variables in the model. Supervisor support, mentoring, goal clarity, and autonomy did not contribute to the multiple regression model. Finally, we can use this equation to compute predicted satisfaction scores: Development value = 0.27 * relatedness + 0.37 * similarity.

Then we looked at the relationship between developmental value and academic learning and career development respectively. Results show that only relatedness to academic program (β = .27, $p$ = .034) significantly predict one's perceived developmental value to academic learning, F(15, 40) = 3.21, $p$ =.002, $R^2$= .36. In contrast, supervisor mentoring (β = .36, $p$ = .039), autonomy (β = -.41, $p$ = .029), and similarity to entry level employment (β = .43, $p$ = .009) can significantly predict one's perceived internship developmental value to career development, F(15, 40) = 3.30, $p$ =.001, $R^2$= .39.

Finally, multiple regression models of career adaptability and outcomes indicated a significant predicting role of career adaptability on both perceived satisfaction (β = .46, $p$ = .028) and developmental value (β = .49, $p$ = .003). Compared with satisfaction model, F(10, 40) = 1.33, $p$ =.24, $R^2$= .06, developmental value model showed a better overall significance, F(10, 40) = 2.39, $p$ =.022, $R^2$= .20. These results indicate that there are a variety of structural factors that may contribute to a students' perception that their internship was a satisfactory and valuable experience. Thus, as institutions and employers work towards improving these co-curricular experiences, these factors should be on the table as areas worthy of further attention, investment, and improvement.

## Focus group results: Outcomes of internships

**Table 6. University of Baltimore Perceived Outcomes of Internship Participation** (N=11)*

| Outcome | Examples |
|---|---|
| Exploration of field | Narrowing focus to specific career goals and trajectories; Exploring the specific environments, skill sets, or workplaces |
| Networking | Meeting other people (e.g. mentors and coworkers) in the field who can support future job searches or become future colleagues |
| Real world experience | Gaining experience that is different from classroom, hands-on practice in field, experience in work settings with people |
| Gaining self-confidence | Overcoming personal self-doubt about one's abilities to perform in the workplace or profession |
| Learning and skill development | Learning and practicing skills specific to the field or job; applying skills learned in classroom in work environment; learning in general |
| Resume boosting | Experience that makes students look better as applicants to employers |

*This sample only includes those University of Baltimore focus group participants who had internships; outcomes are listed in descending order of frequency

Students described how the internships affected them, most often discussing that their experience helped them explore their professional field, network and make connections, gain real world experience, gain self-confidence, learn and develop skills, and boost their resumes (Table 6). In terms of exploring the professional field, several students offered examples of how the knowledge they gained about their professional field in the internship helped them to adjust their career goals. As one student cogently put it, "… an internship can either break or make how you feel about that career," either by clarifying the intern's thinking that they are or are not interested in a particular career, by "narrowing down the list" of the universe of possible careers (in broad fields such as psychology, for example), or by expanding the intern's point of view on their potential careers; as the following student explained about the value of her internship at a law firm:

> *Learning more about the law, a different area of law. I wouldn't have thought I'd be interested in this area of law. I prefer, like, family law, but I do like doing, like, the debt collection cases, and just seeing, like, how the court process goes.*

Professional networking is another major outcome that students discussed as a benefit of their internship; one student explained:

> *… I've met some really amazing people at that office. And I know that they're going to be there for me, you know, down the road if I choose that I want to go that path, either they'll help me, you know, get into a place that—they've actually already even told me they welcome me back with open arms, come see us when you're done with a, with your degree, you know?—so, I know that's there and it's comforting to know that that's there, that no matter what happens, I kind of have a cushion. I feel like I do, anyway.*

Another student who identified as a first-generation college student mentioned that she lacked connections to business and other professional fields—and she felt that some of her peers could rely on family connections to enter the professions—but that she was able to obtain needed connections through her internship placement.

Students also felt that the real world experience was an important beneficial outcome of their own internship, both by familiarizing them with professional workplace culture, expectations, and socialization, and by providing them the opportunity to apply what they learned in their classrooms to actual work; as an English major explained, "I got to see what it looks like to apply sort of my knowledge of writing into the real world and to work." Some students related this real world experience aspect of internships to increases in their own self-confidence; as an Integrated Arts major explained, "And I think the biggest thing that I really gained from that [internship] was actually a little bit of confidence that being an actor, like you actually can get a job."

Students discussed that they felt that they acquired new skills through their internship, such as communication, leadership, and teamwork skills, and technical skills such as new knowledge of particular software used in the profession. And interestingly, some of these students stated that they had a renewed interest and motivation in their academic pursuits—that is, they learned about the skills that are needed in the profession and determined to continue their studies to obtain those skills and launch their careers.

Lastly, a number of students felt that their internship made them more marketable to potential employers, as an item on a resume and as a valuable experience to foreground in a job interview. As one student explained how he planned to foreground his internship experience to potential employers, "Because every company now, that's the first thing they ask you, like your experience."

# X. RECOMMENDATIONS FOR PROVIDING EQUITABLE, HIGH-QUALITY INTERNSHIPS FOR ALL

The literature and the data contained within this report highlight a key issue in the world of internships – that simply making them available does not guarantee that the experience will have a strong and positive impact on student outcomes. Instead, much depends on how they are structured by educators and employers, and experienced by students (Kuh & Kinzie, 2018; O'Neill, 2010). In this final section we provide some recommendations for students, higher education professionals and employers for increasing the availability of high-quality and equitable internship programs for all students at University of Baltimore.

## What students can do

Students are drivers of their self-exploration, career exploration, and career planning and management. They need to actively pursue quality internship experiences, which serve as important work-based learning opportunities that help college students better know their interests, boost skills, and become adaptive to future challenges and changes.

- As illustrated by Figures 2-17 there is considerable social-economic variation among the students at University of Baltimore in our survey, including demographic characteristics, life circumstances, and features of academic programs that may impact students' ability to access an internship experience, especially employment status (Figure 7), academic program enrollment status (Figure 15), academic disciplinary sector (Figure 16.2), and GPA (Figure 17). Students in the focus groups highlighted the issue of financial considerations as a factor affecting their internship participation (Table 4). For their part, students should actively search for resources, connections, and assistance such as utilizing connections between their academic program and potential employers, disclosing financial difficulties, asking for support, and increasing self-management and time-management skills.

- Internship experiences have an impact on students' outcomes including the internship satisfaction and the perceived developmental value, which may directly influence college students' post-graduation career development and psychological well-being. It is critical for students to manage their relationships with internship supervisors or mentors, pay attention to the supervision quality that they receive and actively establish effective communication and professional development opportunities as an intern.

- Although one's internship satisfaction and perceived contributions of the internship to their career development could be limited by many contextual factors, students ought to treat an internship as an opportunity for personal and professional development, no matter if the internship is required or elective. Tables 5 and 6 presents some findings from the focus groups about factors that have the potential to impact students' efforts to work towards their educational and career goals. Students should identify their own short-term and long-term goals before entering an internship, and just as important, these goals need be communicated with their academic program coordinator/faculty and internship supervisor at the sites.

- When facing difficulties and psychological stress or distress, students need to seek advice and professional help (some of these resources are reviewed in the section of this report titled Institutional Capacity and Procedures for Administering Internship Programs).

## What faculty and institutions can do

Faculty and staff are people who guide the students to know about the world of work and the career future of a major. They play a critical role in building the academic foundation for students' future career, connecting the students to employers, and cultivate students' work ethics. The following suggestions can facilitate a quality internship programs:

- Institutional leaders at University of Baltimore would benefit from carefully scrutinizing the results of our analysis of the institutional capacity for internship programs, and consider which areas represent strengths, weaknesses, and opportunities. Regardless of whether a centralized or de-centralized approach is taken with respect to internship programming, leaders should pay close attention to ensuring that issues related to access and program quality are addressed before expanding or mandating internships across the entire institution.

- Given some of the social and economic needs of students at University of Baltimore which may be an obstacle to participating in an internship such as maintaining paid employment and balancing between employment and coursework (see Figures 2-17 & Figure 19), staff should understand and advocate for students' if they disclose such needs, including attending to potential concerns with the students' psychological status and mental health. For students who choose not to do an internship, staff can communicate with them to understand reasons and seek resources to resolve problems. Given the proportion of non-traditional students enrolled at the University of Baltimore, staff and faculty may need to reevaluate requiring an internship and its purposes. This is especially influential for students who identified working full-time as a barrier for not being able to participate an internship. Additionally, academic programs can maximize opportunities to discuss students' acquisition of career-relevant skills in their main paying jobs. For example, some typical internship activities could be provided to students with full-time jobs at their academic programs.

- Students perceived a lack of internship opportunities and challenges of finding a relevant internship, and this in spite of the over 1000 opportunities posted on UBworks (Figure 19 & Table 4). Staff can help with such challenges by continuing to cultivate relationships with employers, and working with students and employers to increase the link between academic learning and workforce practices. Staff can also work to maintain connections with former students to build an alumni network for the purpose of internship referrals. And outreach and advising to students on how to utilize UBworks to identify internship opportunities should continue.

- Factors such as an internship's relevance to the student's academic program, the quality of supervisor support and mentoring, the clarity of goals, and similarity with an entry-level employment are predictors of students' perceived internship satisfaction and developmental value. In addition, student focus groups described quality supervision and mentorship and the internship's relevance to the student's academic program as important features of their internship experiences (Table 5). Staff can support such desirable outcomes by carefully working with students and employers to design, implement, and evaluate the internship program, to ensure that quality work, supervision and mentorship, and relevance to academic program are maintained.

## What employers can do

Employers' recruitment, work setting and design, and mentorship and feedback directly determine students' internship experiences and outcomes. Therefore, employers who host internships or employers who are planning to host internships should attend to the following:

- In addition to the labor and recruitment goals that employers may have for their internship program, internships should primarily be considered as an educational and developmental opportunity for the students. Quality of supervisor support and mentoring and goal clarity are important predictors of student internship satisfaction and the relevance to academic learning and similarity to entry-level employment are important predictors of one's perceived developmental value. Employers can enhance this opportunity by carefully designing internship programs to include consistent quality supervision and mentorship by the supervisor or by other senior staff in the organization (peer mentorship programs can also be supportive). Lastly, employers can value interns' efforts and time through providing emotional support and financial support, if possible.
- It is worthy to note that autonomy (i.e., flexibility and freedom) negatively predicted one's perceived internship value specifically to career development. And the clarity of the goals of work tasks is a predictor of satisfaction. Given these, supervisors can allow for some task autonomy for their interns by encouraging their creativity, but still providing clear objectives and explanation as well as structured guidance about what interns need to accomplish; and provide periodic feedback to interns that highlights their progress and accomplishments, while also pointing out shortcomings and proposing action plans for improvement.
- The relevance of the internship experience to the academic program serves as a critical predictor of positive student outcomes. The academic relevance of the internship was also emphasized by the students in the focus groups (Table 5). Educators and supervisors should discuss short-term goals and long-term goals with their interns, and adjust the internship program to provide experiences that can support those goals. And supervisors should coordinate with academic program faculty and career advisors to work to align the student's internship and academic program in relevant ways.

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# APPENDICES

## Appendix A: Research Methodology

*The College Internship Study* is a mixed-methods longitudinal study (Creswell, 2014; Tashakkori & Teddlie, 2003) of internship programs with three distinct yet inter-related components: (1) an online survey of students while in college and then the workforce, (2) focus groups and interviews with students while in college and then at work (3) interviews with career advisors and other educators involved in internship program administration and with area employers who host interns from the college. Primary data is collected in two phases: Spring of 2019 (T1) and then 12 months later in the Spring of 2020 (T2). The study aims to document the effects of internship participation and program characteristics on a variety of student outcomes, group differences (e.g., socio-economic status, race, gender, discipline, and first-generation status) in internship participation and student outcomes, and institutional experiences with hosting and implementing internship programs.

The survey of students and other data collection activities were conducted in Spring 2019; the current report is based on this data. The online survey was administered to students in the second half their degree programs. In order to focus on students' experiences in internships and not on other internship-like programs, data collection for the survey excluded students in programs with a required practicum (e.g., education fields). The definition of the term "internship" that we employed for the survey and other data collection activities was as follows:

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

To participate in the survey, students were contacted with a letter and cash incentive mailed to their home address, and with two subsequent email recruitment letters, which directed them to a unique password-protected URL. The inclusion of incentives for surveys to raise response rates is based on best practices in survey research (Dykema, et al., 2013). Via the link, the students could review the IRB-approved consent form and signal their consent to participate in the research by entering their full name and birthdate. Students who completed the survey via this link received an additional cash incentive by mail.

This survey contains questions regarding whether or not a student has participated in an internship in the last 12 months while in college, their employment status, and demographic characteristics. Students who answered "no" to having participated in an internship in the last 12 months while in college also answered questions about their career preparation and any factors that may have dissuaded them from pursuing an internship (e.g., finances, child care),

as well as questions that measure their level of career adaptability. For students who answered "yes" to already having participated in an internship while in college, questions were asked about the design features of their internship (e.g., compensation, type of mentoring, job-site activities, etc.), along with questions about demographics, career adaptability, and their satisfaction and perceptions of the developmental value of their internship experience.

**Descriptive statistics and Cronbach alpha coefficients of the measuring instruments**

| Item | Mean | SD | α |
|---|---|---|---|
| Supervisor support | 4.34 | 0.89 | 0.92 |
| Supervisor mentoring | 3.70 | 0.90 | 0.86 |
| Goal clarity | 3.93 | 0.90 | 0.93 |
| Task autonomy | 4.21 | 0.94 | 0.86 |
| Relatedness to academic program | 4.00 | 0.96 | |
| Similarity | 3.73 | 1.04 | |
| Satisfaction | 3.97 | 1.07 | |
| Development value composite | 3.80 | 0.82 | 0.93 |
| Development value of academic learning | 3.83 | 0.89 | 0.94 |
| Development value of career development | 3.75 | 0.83 | 0.86 |
| Career adaptability composite | 3.84 | 0.69 | 0.95 |
| Concern | 3.87 | 0.83 | 0.88 |
| Control | 3.87 | 0.80 | 0.87 |
| Curiosity | 3.72 | 0.84 | 0.88 |
| Confidence | 3.89 | 0.79 | 0.91 |

The results of the survey were analyzed using methods such as Pearson Chi-square test, and ordinal logistic regression to explore the effects of demographic background on internship participation. In addition, correlation, simple regression, multiple regression was utilized to explore influential factors on college students' internship satisfaction and development value.

After completing the survey, the students were asked if they were willing to be contacted to participate in an in-person focus group and to be contacted a year later to participate in the follow-up survey. Students who had and had not participated in internships at the time of the T1 survey were asked to participate in the follow-up survey, thereby constituting distinct groups that can be statistically compared to one another during analysis. Additionally, students who participated in the focus group at T1 will be asked if they can be contacted for a follow-up online or phone interview.

For the focus groups at T1, groups comprised of one to three students were separated into those who have participated in an internship (N=11 students in 9 groups) and those who have not (N=13 students in 7 groups). Prior to the start of the focus group, students were given the opportunity to review the IRB-approved consent forms, ask questions, and to voluntarily consent to participate in the research by signing the form. Students received a cash incentive after consenting to participate in the audio-recorded focus group. Focus groups allow for interactions among participants that explore their experiences and thought processes (Kitzinger, 1995). All students who participated in the focus group completed a free list exercise, where they were asked to identify short words or phrases associated with the term "internships," and to comment on the reasoning for the first term on the list. Students who had an internship experience during college answered questions about the nature of their experience, support from both the academic program and their job-site supervisor, their general level of career adaptability, and so on. For those who have not had an internship, questions focused on the reasons why they have not participated in an internship, as well as their level of career adaptability, and so on.

Lastly, we conducted an audio-recorded interview with educators and career advisors and one employer at University of Baltimore who support student internships. A list of potential recruits from among the University of Baltimore staff and area employers was provided by our colleagues at University of Baltimore. Prior to the start of the interview, participants were given the opportunity to review the IRB-approved consent forms, ask questions, and to voluntarily consent to participate in the research by signing the form. Similar to the student focus groups, the interview participant completed a free list exercise and discussed their responses. The educator interview focused on the types of resources available for their college and/or company, their views on the sufficiency of these resources, and issues related to designing, managing, and implementing effective programs. Lastly, documents from career services, academic departments, and employers that offer internships themselves, were also collected and analyzed for details about design features of internship opportunities.

The data from the free-list exercises collected in these focus groups was analyzed to derive a salience measure that indicates the terms that respondents most identify with the concept of internships (Romney & D'Andrade, 1964). The analysts reviewed the free-list data and transformed participants' raw data into standardized list of terms, since respondents may use different words for similar ideas. Once a list of standardized terms was settled on, two researchers applied the terms in parallel to 10% of raw data. The few discrepancies that were identified were resolved by the researchers and the standardized terms were applied to the rest of the raw data. Data were analyzed using Anthropac software to identify the concepts considered most salient to internships by different groups of respondents (e.g., students and educators) (Smith, 1993; Borgatti, 1992).

Focus groups and interviews were transcribed and analyzed in MaxQDA software, which is a discourse analysis software for sorting and coding transcript data, and ultimately, to identify themes and patterns in the corpus. First, two researchers created a procedure to segment the interviews based on the interview protocol. Both researchers practiced with the protocol and coded a set of focus groups in parallel; and the few discrepancies that were identified were resolved and the rest of the focus groups and interviews were coded by the two researchers. Then, the researchers reviewed the corpus of transcripts to identify themes in the data regarding the obstacles to participating internship and the characteristics of internship experience (Ryan & Bernard, 2003; Corbin & Strauss, 2014). The codes developed through this process were checked by the pair of researchers applying them in parallel to a selection of 10% of the transcript data; a few discrepancies were identified and resolved by the researchers, and the codes were then applied by the researchers to the entire corpus.

The limitations of this study are the small sample size of the student focus groups which could not be representative of students from the wide range of academic programs offered at University of Baltimore. This was also a non-random sample, with students self-selecting into the pool of volunteers who we contacted and tried to schedule for focus groups. Finally, in our study we did not examine whether or not study participants had participated in other work-based learning programs (e.g., apprenticeships), and the potential impacts of these experiences on their learning and career goals.

## Appendix B: Results of Regression tables

**Table 1. Results of correlations and multiple regression analysis of internship program features and students' internship satisfaction**

| Predictor | Correlation with Satisfaction | Multiple Regression Results | |
|---|---|---|---|
| | | β | *p* |
| Supervisor support | .77*** | .39* | .013 |
| Supervisor Mentoring | .69*** | .34** | .003 |
| Goal Clarity | .72*** | .38*** | < .001 |
| Relatedness to academic | .05 | -.03 | .669 |
| Task autonomy | .54*** | -.21 | .079 |
| Similarity to entry-level employment | .51*** | .15 | .147 |

Dependent variable: Internship satisfaction
Independent variables: supervisor support, mentoring, goal clarity, relatedness with academic program, autonomy, similarity
Control variables: gender, race, academic program, GPA, employment status,
β refers to the unstandardized regression coefficient that demonstrated the change in internship satisfaction per unit change in predictors.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

**Table 2. Results of correlations and multiple regression analysis of internship program features and students' development value**

| Predictor | Correlation with Development Value | Multiple Regression Results | |
|---|---|---|---|
| | | β | *p* |
| Supervisor support | .51*** | .17 | .440 |
| Goal Clarity | .56** | .31 | .058 |
| Supervisor Mentoring | .49*** | .19 | .198 |
| Link between academic program and internship | .36** | .27* | .028 |
| Task autonomy | .35** | -.30 | .101 |
| Similarity to entry-level employment | .63*** | .37* | .019 |

Dependent variable: Perceived development value
Independent variables: supervisor support, mentoring, goal clarity, relatedness with academic program, autonomy, similarity
Control variables: gender, race, academic program, GPA, employment status,
β refers to the unstandardized regression coefficient that demonstrated the change in internship satisfaction per unit change in predictors.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

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The College Internship Study

Note: CCWT staff are available to conduct program evaluations and/or needs assessments of a college or university's internship program such as the one reported here. Our procedures are guided by the rapid ethnographic assessment method and can involve quantitative and qualitative data sources including surveys, document analysis, focus groups and interviews. After analysis, customized technical reports can be provided to institutional partners with actionable recommendations provided regarding how to address challenges and capitalize on program strengths.

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.

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