



UNIVERSITY OF
BALTIMORE

Results from the 1-year longitudinal follow-up analysis for the College Internship Study at the University of Baltimore

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CENTER FOR RESEARCH ON
College-Workforce Transitions



The **College**
Internship Study

University of Baltimore 1-year follow-up: Executive Summary

This report includes findings from the second round of data collection (Spring 2020 or T2) at the University of Baltimore for *The College Internship Study*. The data collected at T2 include follow-up interviews with 13 students and a follow-up online survey of 131 students who participated in the first round of data collection (Spring 2019 or T1). These data are analyzed to provide faculty, staff, and leadership at the University of Baltimore with evidence-based insights about the impacts of internship participation on students' lives and careers. This second round of the *College Internship Study* is guided by the following research question: **What are the changes concerning students' internship experiences and outcomes comparing longitudinal data at two points in time?**

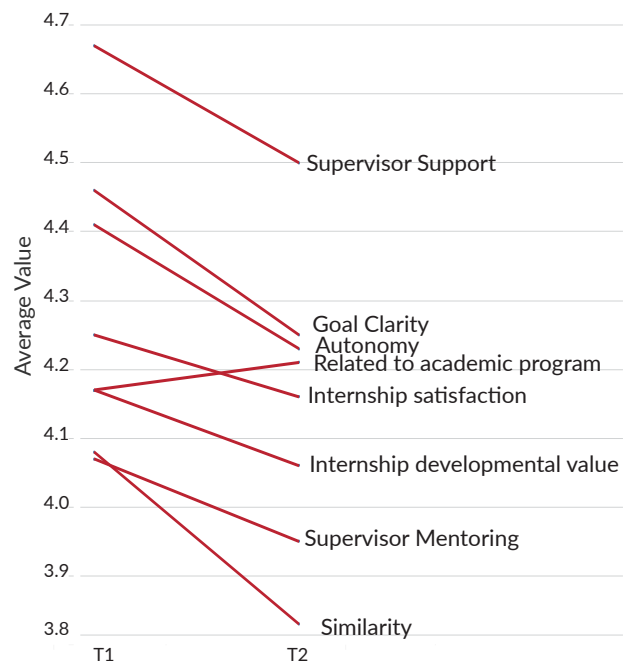
KEY FINDING 1

Nearly one-third of respondents participated in an internship at either T1 or T2. This table shows that roughly 60% did not participate in an internship at either time.

Internship Group	Total (%)
Neither T1 nor T2	78 (59.5%)
T1 but not T2	17 (13.0%)
T2 but not T1	24 (18.3%)
Both T1 & T2	12 (9.2%)

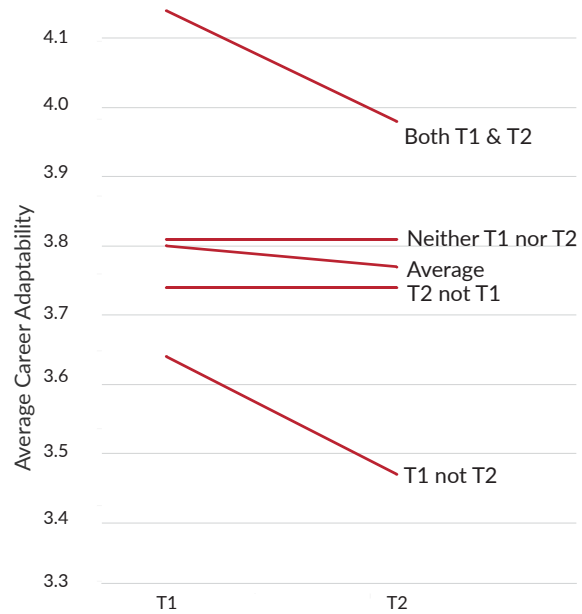
KEY FINDING 2

For students who participated in separate internships at Time 1 and Time 2, though most metrics for internship quality declined over time, there was a slight increase in relatedness to academic program in Time 2. This figure shows the changes in average scores for each measure of internship experience between T1 and T2.



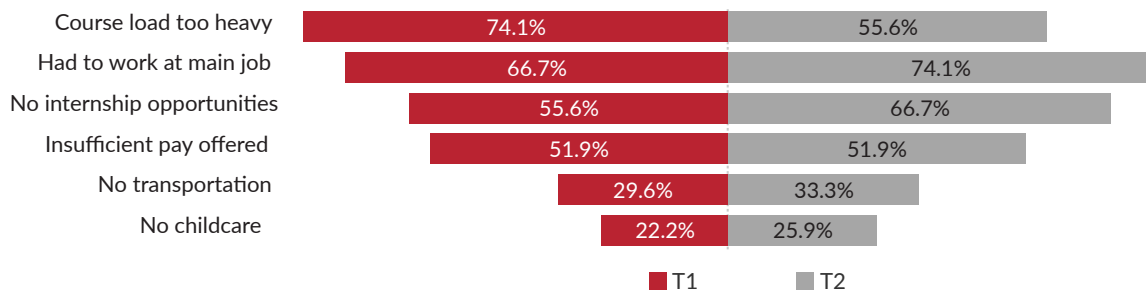
KEY FINDING 3

Students' reported ability to adapt to career changes changed little between T1 and T2 on average. This figure shows the change between T1 and T2 broken down by when students participated in internships. **Students who had an internship at both times, or had one in T1 but not T2, reported the largest decreases in career adaptability.**



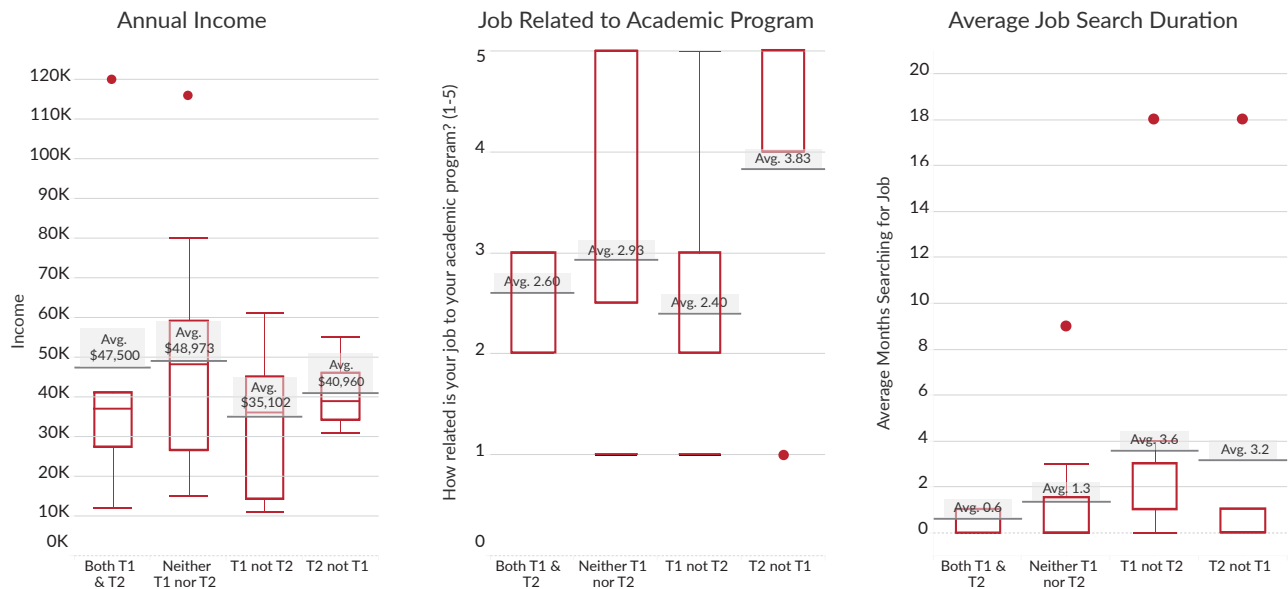
KEY FINDING 4

Of the 78 students who did not participate in an internship at either time, 27 reported wanting to participate in T1 and in T2. This figure shows their primary reported barriers to participation compared across T1 and T2. **A heavy course load was the highest reported barrier at T1, while a lack of opportunity having to work at their current job were both highly reported in T2.**



KEY FINDING 5

Graduates with an internship experience in T2 reported that their jobs were more related to their academic program compared to their peers. Graduates with a separate internship experience at both times reported shorter job search times, though the sample size was small. These three figures show the distribution based on internship participation, with the box plot showing the range of values and the averages highlighted.



KEY FINDING 6

In interviews with students who had an internship experience, several key outcomes emerged. Internships helped students to:



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See the Appendix of this report, where we combined multiple public and proprietary data sources to provide a localized intern labor market analysis. These findings presented in the Appendix are intended to help contextualize the internship experiences at University of Baltimore with respect to the availability, competitiveness, and quality of internships in regional economy.

I. INTRODUCTION

In higher education, internships are widely considered beneficial co-curricular opportunities that help undergraduate students acquire real-world professional experience and become better prepared for their transition to the workforce. Increasingly, however, the promise of internships is subjected to empirical scrutiny as some evidence suggests that internship programs are not available to all students on account of socioeconomic and other barriers (Hora, et al., 2019), and that participating in an internship does not always yield the expected positive results (Klein & Weiss, 2011; Silva et al, 2018).

The literature on internship outcomes has largely focused on students' ability to secure a job and avoid unemployment (Baert et al., 2019; Nunley et al., 2016; Rigsby et al., 2013). Thus far, the evidence regarding labor market outcomes of internship participation continues to be mixed. Individuals' background and internship specific contexts seem to matter substantially in terms of the extent to which internships can benefit students in their job search (Klein & Weiss, 2011). Some argue that internships benefit students by affording them necessary connections rather than contributing to their practical learning (Weiss et al., 2014). Such arguments challenge the notion that internships are always a rich, experiential learning opportunity. Additionally, a myriad of studies has focused on other outcomes of internship participation, including influencing students' career decisions (Powers et al., 2018), students' work ethic and preconceptions about the professional world (Taylor, 1988), students' perceptions of employment traits (Green et al., 2011), among other studies that document positive outcomes for students (Hora et al., 2017; Gillespie et al., 2020).

Generally, most studies on employment or psychosocial impacts of internship participation are cross-sectional, with few studies that document the longitudinal impact of internships for students (Negru-Subtirica et al., 2015; Ocampo et al., 2020; Silva et al, 2018). One interesting exception is Ocampo and colleagues' recent study (2020) on the longitudinal impact of internship participation on students' level of career adaptability. Career adaptability is an important psychosocial competency, which refers to "the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions" (Savickas, 1997, p. 254). It is measured in relation to four psychological traits that interns display at work: levels of concern, control, curiosity, and confidence (Porfeli & Savickas, 2012). Ocampo et al. (2020) conducted a survey of 173 undergraduate hotel and restaurant management students in China, measuring the career adaptability of interns and non-interns at five points in time before, during, and up to five months after the completion of their internships. They found that for the students who interned, all measures of career adaptability increased linearly overtime; whereas for the students who did not intern, there was no growth in the career adaptability except for the dimension of career concern. The findings indicate that internship participation may provide students the opportunity to acquire increased psychological skills and resources to manage career planning and adjustment, and that such a benefit may persist over time.

The College Internship Study is a mixed-methods, longitudinal research project that aims to document the characteristics of undergraduate students' internship experiences, investigate how internship participation is related to certain student characteristics, and analyze how participating in an internship affects the career trajectories of students. The first round of research conducted at the University of Baltimore resulted in a [report](#) with information regarding the internship participation rates, characteristics, and outcomes for students,

as well as findings about barriers that students face when attempting to access internships. The T1 results indicated that internship participation was associated with positive outcome measures of students' career adaptability, internship satisfaction, and perceived developmental value (Chen et al., 2019). In the spring of 2019, CCWT conducted a second round of data collection at the University of Baltimore as part of the College Internship Study.

The survey results from this second round of research for the College Internship Study allow us to study if there are any systematic patterns over time in internship experiences and outcomes for students with or without internship experience before graduation. Specifically, we were able to compare internship experiences between Time 1 and Time 2 (e.g., supervisor support, supervisor mentoring, goal clarity, etc.), and describe changes in attitudes and perceived benefits for students who reported internship experiences at both times. Furthermore, this second round of data allows us to compare how different students fared in the labor market post-graduation. The current report provides descriptive results regarding the job search process for students who did and did not participate in internships as undergraduates, including the graduates' job search strategies, the duration of time spent finding a job, and the pay they receive upon being hired. Additionally, we analyzed students' career adaptability across T1 and T2. Table 1 summarizes the different samples and the outcomes that are presented in this report.

Table 1. Description of longitudinal sample and outcome measures

Description of sample	Sample size	Outcomes measured	Reported
Students who did not participate in an internship at either T1 or T2	n = 78	Barriers to internship participation	Results section III
Students who participated in separate internships at T1 and at T2	n = 12	Internship program features	Results section IV
Graduates with employment outcomes measured at T2	n = 35	Job market performance	Results section V
All participating students with longitudinal psychosocial outcomes measured at T2	n = 131	Career adaptability	Results section V

One-on-one phone interviews with students provide detailed narratives of students' experiences during their internship, and their perceptions of the outcomes and consequences of their internship. In presenting our results we place students' experiences at the heart of our analyses, and hope to inform the work of educators, employers, and career service professionals in order to aid in designing better, more meaningful and effective internship programs for students.

II. SAMPLE AND INTERNSHIP PARTICIPATION

The second round of data collection took place in the Summer of 2020 (T2), a year after the first survey was administered to students in the spring of 2019 (T1). The data collected at T2 include an online survey of students who participated in the T1 survey and one-on-one phone interviews with students who participated in focus groups at T1 (see Table 2). Specifically, the online survey was administered to 231 students; a total of 131 out of these 231 participants from the first-round responded to the second wave of the College Internship Survey, resulting in a response rate of 56.7%. The survey included questions regarding student demographics, career adaptability, characteristics of internships, and post-graduation employment questions for those who had graduated or stopped attending college. In this report we only include the results that pertain to the comparisons between T1 and T2 internship experiences, as well as to the longitudinal outcomes for students who had been employed after they graduated.

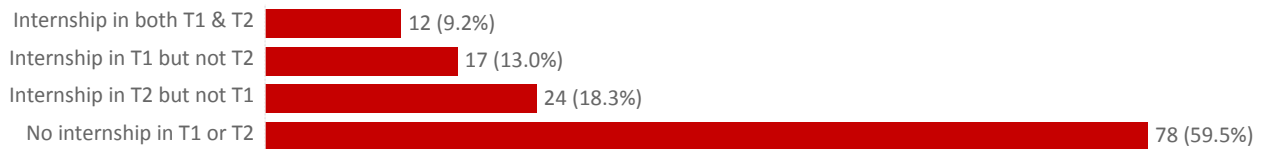
Eight students participated in one-on-one follow-up phone interviews and all but one of those students had participated in a least one internship by the time of the second round of data collection.

Table 2. Description of the Summer 2020 T2 sample

	Survey Sample	Interview Sample
Total	131	8
Gender	Male = 46 (35.1%) Female = 84 (64.1%)	Male = 2 (25%) Female = 6 (75%)
Race	Asian = 8 (6.1%) Black = 58 (44.3%) Hispanic = 11 (8.4%) White = 47 (35.9%) Other = 7 (5.3%)	Asian = 1 (12.5%) Black = 1 (12.5%) Hispanic = 1 (12.5%) White = 4 (50%) Other = 1 (12.5%)
First-generation college student	Yes = 67 (51.2%)	Yes = 3 (37.5%)

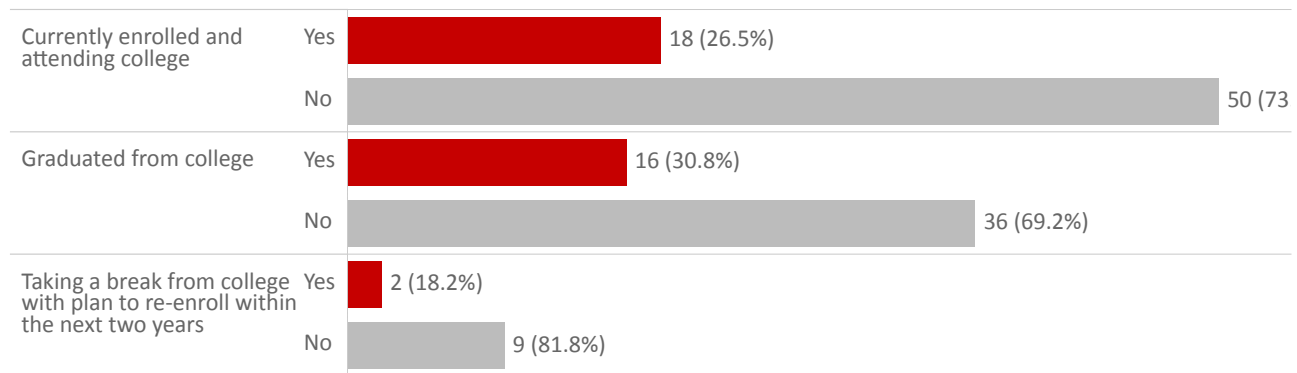
In terms of internship participation, 53 (40.5%) of the 131 survey respondents reported having participated in an internship program. We analyzed the data by comparing students' internship participation across T1 and T2 and found that 24 students (18.3%) reported having an internship experience at T2 but not T1, while 17 students (13%) reported having participated in internship(s) at T1 but not T2. In addition, a total of 12 students (9.2%) reported having done a separate internship in both instances of data collection. In contrast, 78 students (59.5%) reported not having done an internship at either time (see Figure 1). Their barriers to internship participation will be explored and discussed in the next section.

Figure 1. Internship participation across T1 and T2 (n = 131)



In regard to graduation status, 52 students (39.7%) had graduated by the second round of data collection, and 68 students (51.9%) were still enrolled in college. An additional 11 students (8.4%) reported that they were taking a break from college but had plans to return. In terms of internship participation, 30.8% (n = 16) of the students who already graduated took part of internship programs, while only 26.5% (n = 18) of those still enrolled had taken part of an internship in the 12 months before the survey was conducted (see figure 2).

Figure 2. Internship in the Past 12 Months (Yes/No), by Graduation Status (n = 131)



III. RESULTS: BARRIERS TO INTERNSHIP PARTICIPATION ACROSS T1 AND T2

In this section, we present findings regarding the respondents who reported not having participated in an internship in T1 or T2. Of the 102 students who did not participate in an internship in T1, 60 of them (58.8%) reported that they were interested in do so but were unable to take part of an internship experience. In T2, of the 95 students who did not do an internship, 49 students (51.6%) reported being interested in doing one. Moreover 27 of the 60 students who were interested in doing an internship in T1 (45%) reported still not being able to do an internship in T2, despite being interested in doing so. This suggests that some barriers to internship participation may persist over time. Figures 3 & 4 show the breakdown of reported barriers to internship participation at T1 and T2 for these respondents.

Figure 3. Barriers to internship at T1 for students who did not participate at either time. (n = 27)

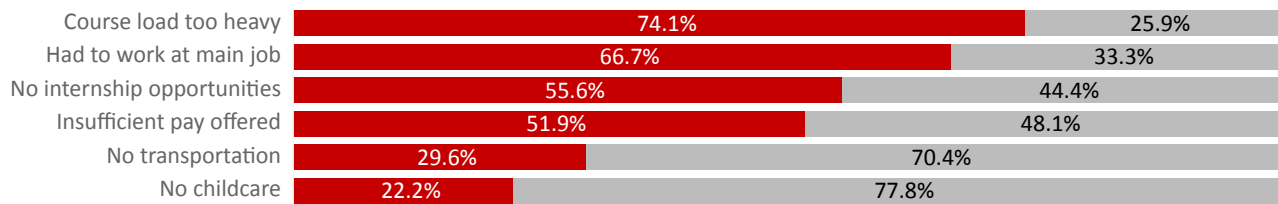
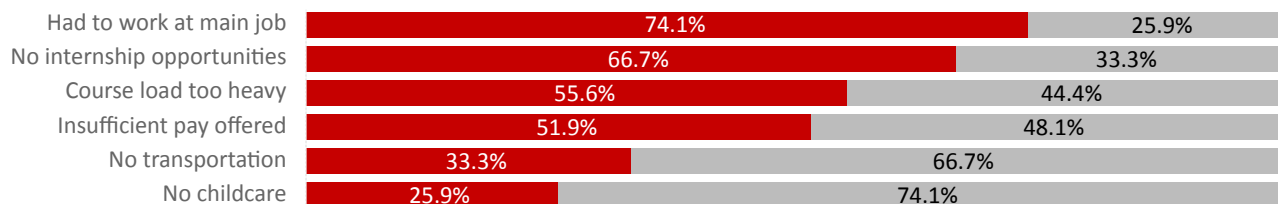


Figure 4. Barriers to internship at T2 for students who did not participate at either time. (n = 27)



For the most part, the same barriers persisted from T1 to T2, with a heavy course load, the need to work at their current job and a lack of internship opportunities being primary factors contributing to students’ inability to participate in an internship. Lack of transportation and lack of childcare remained consistently low in frequency across both studies.

IV. RESULTS: STUDENTS’ INTERNSHIP EXPERIENCE ACROSS T1 AND T2

This section focuses on students who reported separate internships at T1 and T2. We compared the survey measurement scores that characterize multiple internship program features and students’ experiences. We analyzed interview data to understand the reasons why students participated in multiple internships.

Some of the students that we interviewed in this second round of the study completed two or more internships before or during college. A few students decided to pursue a second internship because they felt disappointed by their first and did not feel they had enough experience. Consequently, they wanted to gain more career-relevant experience so that they could be competitive in their field and obtain a job after graduation. This was the case for two students at the University of Baltimore. One student said that he completed a total of four internships—the first was while he was attending community college and the last three were completed through his program at the University of Baltimore at the Baltimore City District Court. He felt that the more internships he completed, the better prepared he would be to transition to a full-time paid role. Another student who is in the field of arts talked about the challenge of finding internships in the Arts world, because there is an expectation and/or misperception by many organizations that the average college student has more experience than s/he has. The student felt that she needed—at the very least—to do a second internship in conjunction with her part time job. She also explained that most theater internships do not pay; are hard to come by; and by the time she is aware of opportunities, they are already taken. The ones that are still available require existing experience or are unpaid. As a result, she found herself in a catch-22 situation.

Table 3 presents a summary of each dimension of internship program features that reflect students’ internship experiences. All questions were measured using a five-point Likert scale. Consistent with T1 data, at T2, the supervisor support score was higher than the mentorship score,¹ suggesting the need for further study to differentiate between supervisors supporting individuals but not mentoring them in a way that is meaningful.

Additionally, taking advantage of these longitudinal measures for various program features, we compared scores of each of the measures across the T1 and T2 surveys (see Table 3). Students who took an internship at time 2 reported they received virtually the same amount of support from their internship supervisor than during their internship experience at time 1. Similarly, students reported having experienced about the same level of supervisor mentorship during their internships at both times.

On average, the reported clarity students had about their goals in their career was slightly higher in T1 compared to T2, but this was not a statistically significant difference. All other scores reported in the table—the internship’s relatedness to students’ academic program, the autonomy students experienced, their satisfaction, and the value they perceive they received for doing the internship—were no significantly different between the students’ most recent and previous internship experiences.

Table 3. Internship experience measurements² (n = 12)

Internship Program Features	T1		T2	
	Mean	SD	Mean	SD
Supervisor Support (1=not at all, 5=a great deal)	4.67	0.50	4.50	0.62
Supervisor Mentoring (1=never, 5=extremely often)	4.07	0.88	3.95	0.97
Goal Clarity (1=not at all clear, 5=extremely clear)	4.46	0.50	4.25	0.58
Relatedness to academic program (1=not at all well, 5=extremely well)	4.17	0.69	4.21	0.86
Autonomy (1=not at all, 5=a great deal)	4.41	0.83	4.23	1.08
Similarity (1=not at all similar, 5=extremely similar)	4.08	0.79	3.83	1.19
Internship satisfaction	4.25	0.75	4.16	0.83
Internship developmental value	4.17	0.64	4.06	1.15

1 Using the present sample, the result is statistically significant, $t = 4.07$, $df = 35$, $p < .001$.

2 The perceived **supervisor support** scale consists of four items assessing the way the internship participants evaluated their relationship with their supervisor. The **supervisor mentoring** scale assesses the provision of direction and feedback about task performance and career planning using five items. The **goal clarity** scale consists of two questions and aims to capture how clear the job duties were for the intern. The **relatedness to academic program** question measures how related a student feels the internship was to their academic program. The **autonomy scales** measure how much flexibility and freedom the participant had in his or her job. Lastly, the **similarity** question captures how similar the participant’s tasks were at his or her internship to those of an employee at an entry-level position at the organization. The **internship satisfaction** question measures how satisfied students were with their internship experience. Finally, **internship developmental value** questions assess students’ perception of how well the internship experience contributed to their own career development. Please refer to [Time 1 technical report](#) for detailed information of the questions for each measurement (Chen et al., 2019).

V. RESULTS: STUDENT OUTCOMES A YEAR LATER: JOB MARKET PERFORMANCE AND PSYCHOSOCIAL OUTCOMES

By the second wave of data collection, 52 of the 131 respondents had graduated from the University of Baltimore. Among the 52 students, 35 of them (67.3%) had found jobs. The other 17 students who had not found jobs yet attributed their unemployment to a general lack of opportunities (because there were no job opportunities for them or because they lacked employable skills).

Survey results: Employment, job search, and earnings at T2

For the 35 employed graduates, the average number of months that they searched for and found a job was 2.2 months, with a high standard deviation ³ of 4.5 months. As shown in Figure 3, only 34.3% (n = 12) of them found their jobs “very” or “extremely” related to their majors in college. Notably, about 46% (n = 16) of students reported that their current jobs were “not at all” or “a little” related to their majors, indicating an important degree of discrepancy between fields of study and current career paths.

Figure 5. How much is your current position related to the field you studied in college?

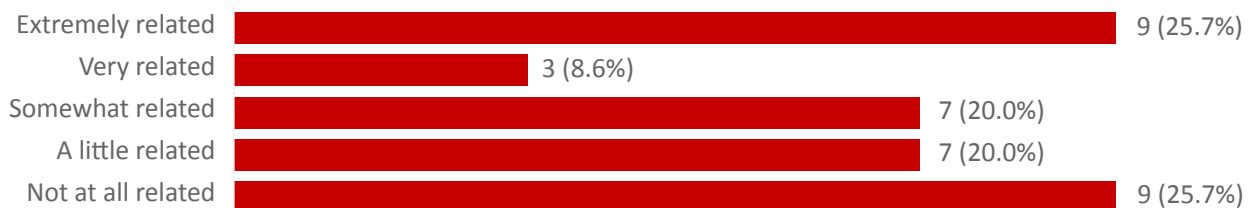
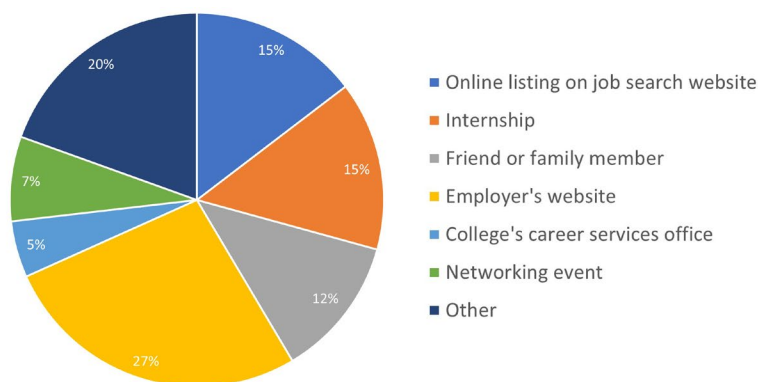


Figure 6 shows the students’ job searching methods. Most respondents who found a job did so through the employer’s website (27%), and a fair share found their job through an internship (15%) or a job ad posted in an online job search engine (15%). An important portion of our sample found jobs through methods other than those listed here (20%).

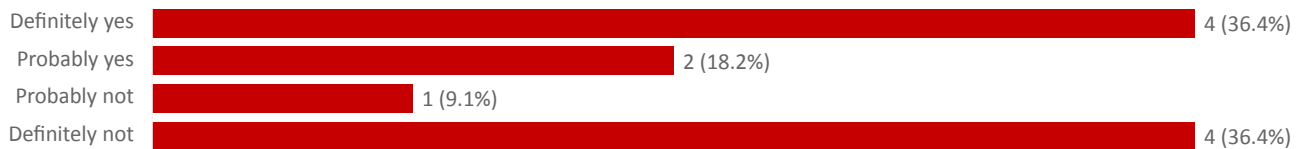
Figure 6. How did you find out about your current job? (n = 35)



³ The standard deviation is a measure of the variation of a set of values. A low standard deviation indicates that values are close to the average, and a high standard deviation means that values are spread out over a wider range.

Among the 35 employed graduates, 21 (60%) had internships before graduation. Eleven of them answered the question asking whether their internships lead to their current job. More than half (54.5% or 6) of the responses claimed that their internships “probably” or “definitely” led them to their current jobs, but a comparable number of respondents indicated that their internship probably did not lead to their job (see figure 7).

Figure 7. You indicated that you previously had an internship(s), did your internship lead to your current employment? (n = 11)



Thirty-two students reported their annual income. The average income of these students was \$43,156.25, with a standard deviation of \$25,703.86; the median ⁴ was \$39,900. Figure 8 shows the distribution of their annual income.

Figure 8. What is your estimated annual income (before taxes or other deductions)? (n = 32)



Survey results: Job market performance by groups

Fourteen of the 35 employed students did not participate in any internships during college, 6 reported internship participation in T2 but not T1, 10 reported internship participation in T1 but not T2, and 5 reported participation in separate internships at T1 and T2. The job market performance of these four groups of students is compared below.

We compared the average job search time in months among the 35 respondents who were employed at the time of the survey between internship groups. Three respondents did not provide an answer to this survey item, which leaves a sample of 32 students to examine. Furthermore, two respondents—both of them with at least one internship experience—indicated a job search time of 18 months, which constitute an extremely high number of months given the distribution of the rest of the respondents. The reasons behind these extremely lengthy job search periods may be particular to these respondents, and may not be representative of the group of respondents as a whole. These considerations warrant excluding these two respondents from the following comparisons between internship participation groups.

⁴ Median is a value that separates the higher half from the lower half of a data sample.

The average search time for those who had internships at both T1 and T2 was 0.6 months. The average search time for those with only one internship experience at T1 or T2 was 1.8 and 0.2 months, respectively; and the average search time for those with no internship experience was 1.3 months. None of these differences are statistically significant—perhaps due to sample size—but it should be noted that the group with the most variation in job search time was that of those with no internship experience—the 12 individuals in this group reported lengths of time ranging from 0 to 9 months.

No significant differences were found between groups in terms of how much respondents considered their jobs related to their fields of study.⁵ Respondents who only did an internship in T2 reported, on average, higher degrees of relatedness between their current job and their degree. Similarly, students with no internship experience reported slightly higher level of relatedness (see figure 9). The differences between these participation groups, however, are not statistically significant.

Figure 9. How much is your current position related to the field you studied in college, on scale 1-5, by internship participation? (n = 35)



Among the 32 students who reported their income, those who had internship experiences at both T1 and T2, and those with no internship experience, had the highest average annual income at \$47,500 and \$48,973.33, respectively. Those who had internships in T1 and not T2 had the lowest annual income (\$35,102, see figure 10). The difference between groups, however, is not statistically significant.

Figure 10. What is your estimated annual income (before taxes or other deductions), by internship participation? (n = 32)



We also investigated the relationship between internship participation and post-graduation employment status for all 52 students who had graduated from the University of Baltimore. No significant correlation was found between these two variables, meaning that there is no obvious difference as to whether one group has a higher internship participation rate than the other.

⁵ The relatedness between current job and college major was measured by one single question asking “how much is your current position related to the field you studied in college?” using a five-point likert scale from 1=Not at all related; 2=A little related; 3=Somewhat related; 4=Very related; 5=Extremely related

In sum, the majority of the students who graduated from the University of Baltimore were employed at the time we collected the data, one year after our first round of data collection. Of those who did internships before graduation, about half indicated that their internships lead to their current jobs, but a comparable percentage of respondents reported their internships did not likely lead to their job. Nevertheless, internships were reported as one of the most common approaches to searching and finding a job—along with the use of online job search engines and exploring the websites of employers themselves.

Notably, nearly half of the students who graduated and found jobs (46%) reported that their jobs were not related to their field of study—only a third (34%) considered their current job related to what they got trained in college.

There were no significant differences found across internship participation groups. Students without any internship experience were no different than students with one or multiple internships in terms of their annual income, their time to search for a job, or the extent to which they found their jobs related to their fields of study.

A larger sample size would be needed to further explore these associations or lack thereof. Additionally, the underlying mechanisms of the role of internships in individuals' job search processes and labor market outcomes need to be further investigated. We plan to continue exploring the longitudinal effects of internship experiences on student's employment outcomes based on the above-mentioned findings, which utilizes a data set that aggregates the survey results from all sites participating in the *College Internship Study*. The results of the follow-up interviews highlight some of the specific ways that students perceive their internships to benefit their academic and career development.

Survey results: Career adaptability development

This analysis uses career adaptability as an important psychosocial competency. It was measured using the 24-item Career Adapt-Abilities Scale (CAAS, Savickas & Porfelli, 2012), consisting of 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 these subscales are measured by six questions that elicit how strongly the respondent rates themselves on these attributes on a five-point Likert scale (1 = not strong, 2 = somewhat strong, 3 = strong, 4 = very strong, 5 = strongest).

Table 4 shows the T1 and T2 mean scores and standard deviations for each sub-scale and the composite score for all 131 respondents. In general, the scores of all four dimensions—control, control, curiosity, and confidence—remain the same between T1 and T2. The exception is the score for the concern sub-scale slightly decreased and the score of curiosity slightly increased in T2. However, this difference is not statistically significant.

We then assessed individuals' career adaptability development over time for different internship participation groups. It is important to note that among all groups there are relatively small sample sizes. Students with internship experience at both T1 and T2 reported a decreased score of composite career adaptability, but no statistically significant differences were found across time for each of these groups.

Table 4. Career Adaptability Results across T1 and T2. (n = 131)

Career Adaptability Composite and Sub-Scales	T1		T2	
	Mean	SD	Mean	SD
Career Adaptability Composite	3.80	0.68	3.77	0.70
Sub-Scale: Concern	3.89	0.82	3.71	0.82
Sub-Scale: Control	3.82	0.84	3.82	0.79
Sub-Scale: Curiosity	3.67	0.87	3.72	0.80
Sub-Scale: Confidence	3.83	0.76	3.82	0.86
Career Adaptability Composite Score by Internship Participation	T1		T2	
	Mean	SD	Mean	SD
Internship at both T1 & T2 (n = 12)	4.14	0.59	3.98	0.38
Internship at T2, not at T1 (n = 24)	3.74	0.71	3.74	0.75
Internship at T1, not at T2 (n = 17)	3.64	0.63	3.47	0.75
No Internship at T1 or T2 (n = 78)	3.81	0.69	3.81	0.70

VI. INTERVIEW RESULTS: STUDENT INTERNSHIP OUTCOMES

We conducted follow-up interviews with 13 students who were still enrolled at the University of Baltimore. During the interviews, students reflected on a wide range of takeaways from their internship experiences. Below we describe the most frequently discussed outcomes, including the exploration of their real-world experience, getting a job offer, learning experience, skill development, and socialization into the profession as indicated in Table 5.

Table 5: Perceived Outcomes of Internship Participation at University of Baltimore (n = 13)*

Outcomes	Examples
Real world experience	Gaining hands on practical experience in the field of practice and/or in the workplace setting that is different from the classroom environment.
Getting a job	Ability to get a “foot in the door” or a job offer from the internship host as an outcome of an internship and transitioning from that internship experience to either a part time or full-time employee.
Learning experience	Students identify internships as a “learning” experience, including learning concepts. Students also identify academic outcomes of internship participation, such as better grades or higher motivation to succeed in school.
Skill Development	Students identify internships as a “learning” experience, including learning concepts. Students also identify academic outcomes of internship participation, such as better grades or higher motivation to succeed in school.
Socialization into the profession	Familiarization with behaviors, attitudes, communication styles within the company culture, a work setting or field. Developing personal workplace ideals or values.

*This sample includes the 13 follow-up interviews with students who had participated in an internship from University of Baltimore. The internship outcomes included in Table 5 are arranged in descending order of frequency.

The most frequently reported beneficial outcome of internship participation was being able to gain meaningful real-world experience. Students indicated that being successful was largely understood as being able to complete an internship and to get a job in their chosen career. One student, for example, explained how the internship was “very important” in gaining real world experience in terms of career goals:

I think the real-world experience you get from doing an internship is very important. You get to see what it's like in the field and in the workforce. And potentially, even get your foot in the door for that company, to go ahead and work with them right out of college. Besides that, making connections. Yeah, I think just the real-world experience. I think that's probably the most important part for an internship.

Students also described gaining a feeling of accomplishment in their ability to get a job offer as a result of their internship experience, as one student described his experience:

With the internship, you had to learn a lot of information like about the court system and [inaudible] related to like court, and escrow and debt collection. And you had to take several tests before we were even able to start at the internship. We had to take four tests in line and then we went to court, and then we had to take a test there. And all that information I received to prepare for the test helped me have like the proper knowledge that I needed during the internship. And then me showing that I know the law related to those areas ultimately led to my job.

Another student discussed his enthusiasm in undertaking an internship because it was an opportunity to learn critical thinking skills and to apply theoretical knowledge in any given situation, including the classroom.

Like I said before, it let me see what, how different working a job, actually being on a job is from like when you're in school. Like, you're learning the theory, you know. It's about critical thinking. I guess that's one of the things I learned being able to think on the spot. And being able to find solutions and not necessarily, you know, ask people questions every single time. You know, being able to stand on my own and try to apply... The only phrase I could use would be learning how to apply my knowledge, rather than just learning and absorbing knowledge. If that makes sense. You know, basically, being able to put everything I've learned into action, rather than just, asking people for help all the time. So, that was one of the things that I, I'd say I gained.

Students described how they acquired specialized skills and knowledge during their internships, including technical skills and learning the behaviors of the “chain of command”. A student studying in the law enforcement field, for example, explained that he is learning how the police department works internally and the training that is involved:

They do offer getting trained in specific programs for dispatching, so like using the NCIC program and things along those lines to be dispatched...which I know law enforcement agencies will love to see on a resume, because using programs like NCIC...and things along those lines are important, or that they're pretty much used every day, so, and it's also just kind of getting used to just working, you know, in the law enforcement kind of realm.

Most of the students we interviewed also highlighted acquiring relevant skills and training related to the specific field of interest. For one student majoring in law enforcement that meant “learning how the court system operates”. Many students specifically talked about the importance of applying and building on existing skills, learning new skills, developing interpersonal and communication skills, and developing skills during the internship that can be applied to passing certification exams and then to the professional field.

Besides gaining general soft and hard skills from their internships, students often discussed their insights about socializing into their professional field of study and understanding company culture. Some one of these insights involved the importance of having an internship that aligned with students’ degree of study because this would provide a “steppingstone” in terms of socializing into their profession of choice. For example, one student described the internship as,

The only way of going into the field and getting my foot fully in the door so this way I could learn some things right before I go into this field. So, I would definitely want an internship before I actually work in that job in that field.

Likewise, a student studying Accounting described the internship as “meshing” with ones’ personal goals and not only learning the behaviors and attitudes of the field, but developing specific workplace experience. Other students discussed having a “sense of belonging in the field”, “acquiring experience in professional development”, and “getting the experiences in the field and taking on more responsibility”. One student alluded to the importance of workforce entry:

Getting ready for workforce entry. I think that's the best way to get my foot in the doors to do internships. That way I can network more and get more experience underneath my belt while I'm doing that networking.

However, once student stressed the importance of working with people who are “more ready to have an intern” and “have a plan for what to do with them”. Otherwise, students run the risk of being left to their own devices during their internship. These examples illustrate how, over time, students were able to leverage internship experiences in their favor for various positive outcomes, including academic and career development, but also specific positive employment outcomes as well.

VII. RESULTS: STUDENTS’ EXPERIENCES WITH COVID

Interviews with students were conducted after universities across the country transitioned their classes to online format because a State of Emergency was declared in March as a result of the COVID-19 pandemic. Additionally, a “Stay-at-Home Order” was declared by Governor Hogan in the State of Maryland on March 30, 2020. Therefore, we wanted to understand how the COVID-19 pandemic impacted students’ academic and career trajectory, including their internship experiences.

Students discussed the numerous effects of the pandemic on their internship trajectory, their academic plans, and career aspirations. Many students were concerned about the loss of their current job and having to watch their spending habits; the delay of their internship, which impacted their career goals after graduation. There was also a sense of having to figure out how to cope with finishing course requirements, working at a distance, being quarantined at home, or not being able to see family members. For example, students working in the retail and service industry were concerned about being under employed or losing their job. One student commented:

Definitely the whole unemployment thing. I think my store, I mean we weren't making much profit. It was kind of losing more. And we saw it, but we didn't see that it was coming so soon, that store was going to close. But if it happened...I feel like the pandemic made it worse. Made it go faster. stuff. And I feel like if we had waited a little bit longer or had been given the opportunity to be able to like help us out, maybe [inaudible] company. Like maybe after to help people out, until they can actually look for a job, but right now it's like we have to stay inside.

Students discussed how their plans changed as a result of COVID. One student explained that normally the spring semester period would be a time to look “for a job right out of college, applying to places”. However, the student pointed out that, “since COVID has hit us, I'm probably going to be unemployed after college. I'm considering applying for unemployment for a little bit, until, you know, things calm down”. Another student decided to stop working altogether—based on the advice of his parents—for fear of catching COVID.

Many students stated that their internship interviews were either delayed, switched to online interviews, or that hiring would be paused altogether. A student who had lined up an internship at Morgan Stanley explained that she was forced to delay her career plans—because of the pandemic—or switch jobs entirely in order to secure the next employment opportunity.

I should be finishing up, and I had lined up an internship at Morgan Stanley, but then this whole thing happened, and the markets are collapsing, and banks have already lost 40% of their profits. I don't know if they're going to be hiring anybody, so I'm probably going to end up just going to be a high school teacher in Baltimore City somewhere.

Other students articulated that one of the major changes that occurred is being fearful or catching the disease and not being able to see family members who have a “higher risk of potentially dying from the disease” or having to think differently about minor things that are normally “taken for granted in daily life” such as food and being able to “spend money on school related items”.

In addition to having to think about their internship trajectory, many students described changes that have occurred in their personal life related to the current COVID-19 situation. A common response was the fear of going outside and having to social distance, dealing with anxiety and depression, and worrying about either getting sick or having a loved one contract the disease and die.

For instance, one student discussed his disquietude:

Well, I have a therapist that I talk to once a week. I've been stressed out because I'm so worried about catching the virus, I'm still worried about it because of my own health risks, so it worries me a lot. But I just try to, I talk to him about how to deal with the, how to deal with everything, you know, how to deal with being inside all the time and things I can do to keep my mind occupied and not to think about [inaudible] things that are going on, on the planet right now.

In summary, our interviews highlight the great variety of students' experiences with their internship outcomes and how the pandemic impacted their internship and educational trajectory. Thanks to the quick responses and support from university staff and educators, most students were able to fully transition to online learning. Students who could rely on existing social, emotional, and financial supports (e.g., parents, spouse, savings, stable employment) seemed to adapt more easily to the unexpected circumstances and resulting challenges. Thus, it seems likely that inequities regarding access and quality of internship opportunities may be reinforced by the pandemic.

VIII. CONCLUSIONS AND RECOMMENDATIONS

The first round of data collection for the *College Internship Study* at the University of Baltimore indicated that there were social and economic barriers that some students faced when interested in participating in internships. It also suggested participating students' relatively high career adaptability, as well as positive outcomes of internship participation, including internship satisfaction and perceived internship developmental value. Furthermore, these internship outcomes were associated with high quality of supervisor support, the presence of supervisor mentoring, the clarity of work tasks, task similarity to entry-level jobs, the link between

academic programs and internships, and the amount of the intern's autonomy in performing their work (Chen et al., 2019).

The findings of this one-year follow-up study indicate that barriers to internship participation persist for some students. Some students interested in doing internships remain unable to take part of one because of their need to work at their current job, a general lack of internship opportunities, and a heavy course load in college that makes it difficult for them to engage in outside activities. The longitudinal comparison between T1 and T2 did not reveal major differences between the group of respondents with and those without an internship experience. Both groups reported roughly the same annual income, time to find a job and relatedness of their job to their degree. The career adaptability scores were also similar for all respondents between T1 and T2.

The first [report](#) from the College Internship Study at University of Baltimore contained recommendations for students, educators, and employers to ensure quality internship experiences for University of Baltimore students. The results of the T2 follow-up highlight the importance of the following recommendations:

- There remain students who want to participate in internships but who face financial and other obstacles—such as the need for continuous paid employment—and educators and employers are encouraged to find ways to remove this barrier by finding ways to compensate interns whenever possible.
- Although income difference is not salient in this study, the literature points to some evidence suggesting that internship participation may be associated with positive outcomes, including higher annual income after graduation and closer connections between employment and fields of study in college. However, the ways how internships lead to better outcomes remain under scrutiny. Students should be coached on how to advocate for their needs with employers and to communicate their need for mentorship. Additionally, educators and employers should work to ensure that internship supervisors understand the need and are equipped to provide supportive mentorship to their interns.
- Career adaptability plays a central role in college students' school-to-workforce transitions. Regarding the identified decreases in students' career concern and increases in students' career curiosity from T1 to T2, educators and internship employers are encouraged to proactively offer support for building student readiness and resources for dealing with present and future career challenges (Savickas, 2013).
- Students who had an internship were able to leverage internship experiences in their favor for various positive outcomes and in the end, having real world experience became an important experience. Students recognize the value and worth of an internship, and they should continue to seek such experiences. Additionally, educators and employers should work together so that these partnerships remain and support students professional trajectory.
- It's salient that during this COVID-19 pandemic, the feelings of insecurity about one's current professional career and future job prospect is in jeopardy. Given that things are changing constantly during this State of Emergency, it is fair to say that particulars are feeling uncomfortable about their future. While the current literature has not attended to the immediate issues within this report; the details about the pandemic and student internships highlight the adaptability and emotional changes endured during this season.

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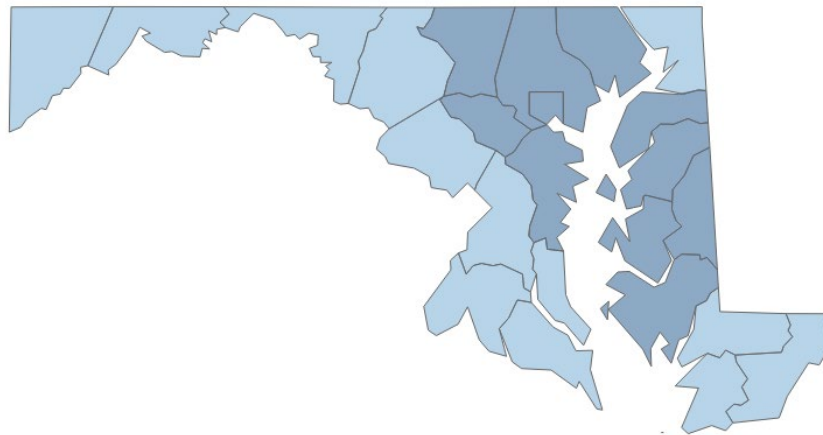
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Appendix 1: Intern Labor Market Analysis

As a complement to the primary data we have collected as part of the College Internship Study, we have combined multiple public and proprietary data sources to provide a localized intern labor market analysis. These findings are intended to help contextualize the internship experiences at your institution with respect to the availability, competitiveness, and quality of internships in your regional economy.

We determine Intern Labor Markets based on Commuting Zones (CZ). CZs are statistically derived clusters of counties generated by the USDA and were most recently updated by Fowler et al. (2016). These zones are created based on commutes from home to work reported to the Census as well as a hierarchical cluster analysis of consumer data from local economies.⁶ CZs are preferable to Metropolitan Statistical Areas (MSAs) for nation-wide comparisons because every geographic region in the country is included. MSAs, on the other hand, have population-based cut-offs. The metric we use to measure Intern Labor Markets is the Intern Supply Ratio, which is simply the ratio of supply and demand for interns in the CZ. Demand is based on Burning Glass Technologies Labor Insights job ad data, while supply is the total enrollment of all post-secondary institutions in the CZ. Figure 1 shows a map of the counties included in the University of Baltimore's CZ highlighted among their neighboring counties.

Figure 1: University of Baltimore's Commuting Zone



The Intern Supply Ratio is not a perfect metric and is currently being refined to account for the fact that not every enrolled student should be considered a “potential intern”. At present, it considers the maximum amount of supply, suggesting that the ratio is inflated to its’ greatest supply extent. Table 1 displays the supply, demand, and ratio for the CZ in which the University of Baltimore is situated. **The ratio indicates that there are roughly 53 potential interns to each internship job posting⁷.**

⁶ <https://www.ers.usda.gov/data-products/commuting-zones-and-labor-market-areas/>

⁷ Burning Glass data can be broken down by required education, though many internship posts do not include this requirement, so we have not disaggregated by this measure. Most institutions also typically have a mix of degree program offerings, resulting in the decision to leave job postings as aggregated.

Table 1: Supply and Demand in Intern Labor Market

Variable	Value
Total Enrollment in Commuting Zone	218,242
Total Internship Job Postings	4,190
Intern Supply Ratio	52.09

Figure 2 shows the top 15 employers of interns in the University of Baltimore’s CZ. Of the 4,190 total job postings, 525 (12.53%) come from these top 15 employers.

Figure 2: Top 15 Employers of Interns in Commuting Zone⁸

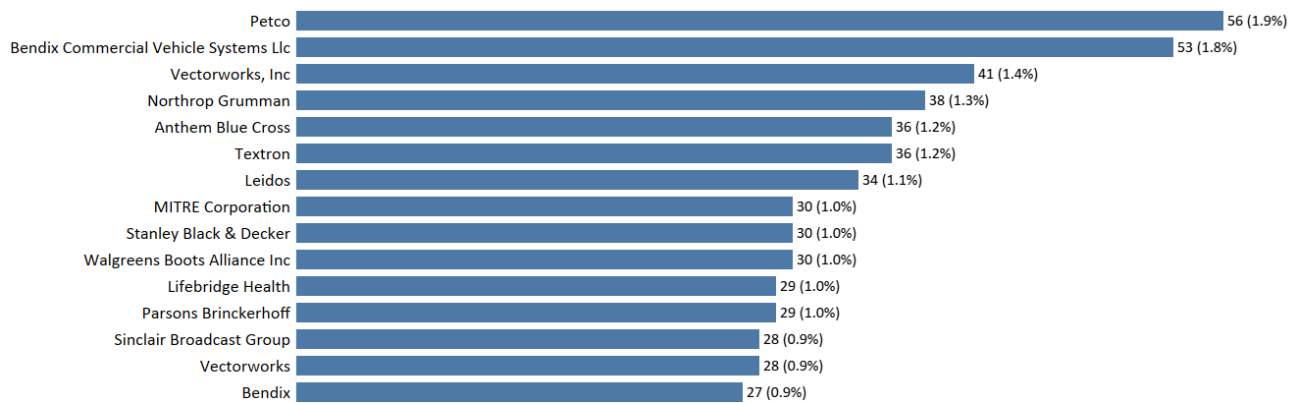
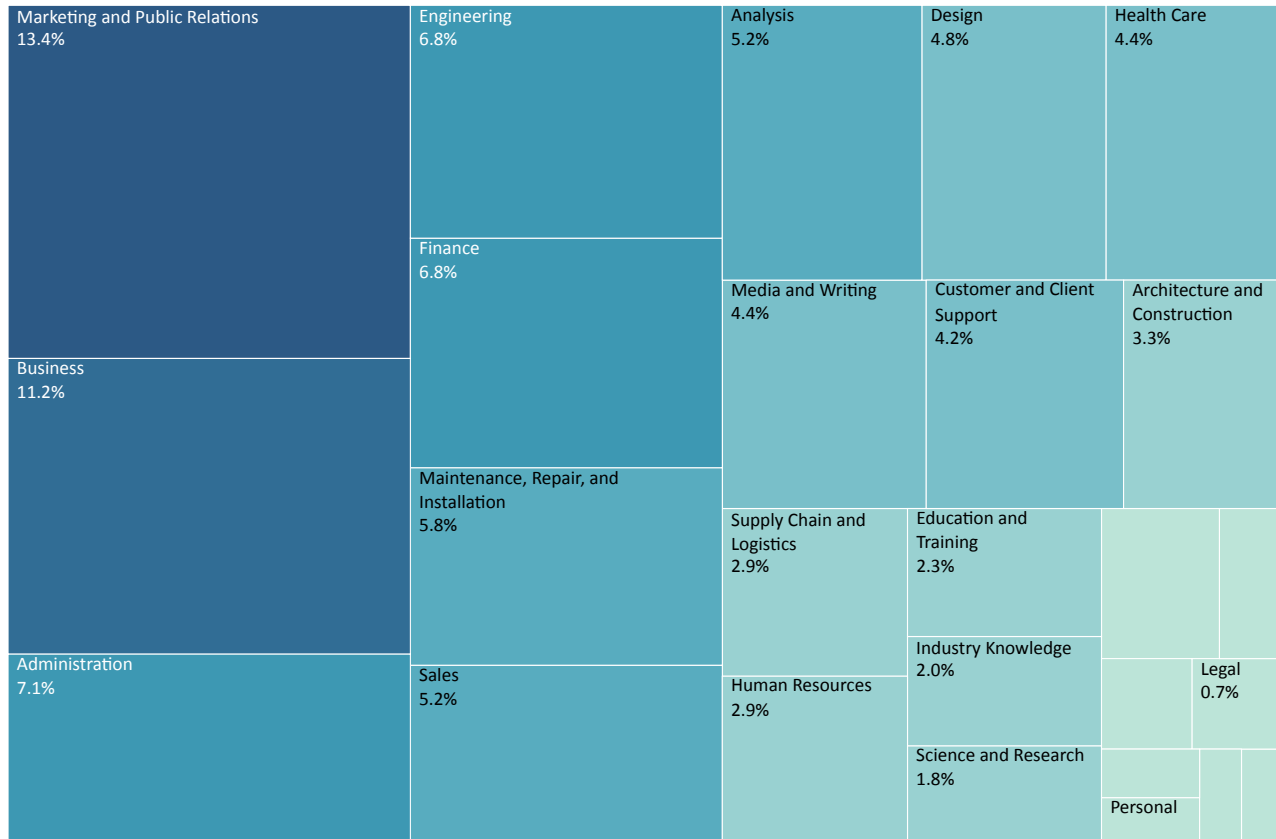


Figure 3 represents the top skill cluster families in demand for interns for the CZ of interest. Skill cluster families are generated by Burning Glass and are explained in their released White Paper.⁹ There is a total of 28 skill cluster families. Each job posting can represent more than one skill cluster, meaning that total cluster count should only be considered relative to other skill clusters rather than relative to job postings.

⁸ Percent in parentheses represents share of total job postings, rather than share of top 15. In the event that employers appear to be listed multiple times by Burning Glass, we have chosen to defer to Burning Glass’ employer designation criteria.

⁹ <https://www.burning-glass.com/research-project/skills-taxonomy/>

Figure 3: Top Skills in Demand for Interns



The tree map presented in Figure 3 indicates a diversity of skills in demand for the University of Baltimore's CZ. There is no one clear skill dominating the demand, though there appear to be tiers of demand. Marketing and Public Relations and Business are both above 10% of the total skills demand. Taken with the second tier of Administration, Engineering, and Finance, these five skill clusters represent nearly half (45.3%) of all skills demanded by employers of interns. The percent values in the figure can be thought of as the proportion of the given skill cluster relative to the total skill cluster codes.



The **College Internship Study**



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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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