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Focus on the Finish Line: Does High-Impact Practice Participation  
Influence Career Plans and Job Attainment?

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### Abstract

High-impact practices (HIPs) are an important component of student engagement in higher education, as they promote learning, development, and persistence among students. The goal of this study was to extend the research on HIPs to explore potential connections with HIP participation and career outcomes. Using data from the National Survey of Student Engagement, this study explores whether high-impact practice (HIP) participation influences plans for career and further education for graduating seniors, and whether HIP participation has a positive impact on job attainment for these students. The results of logistic and multinomial regression analyses suggest that even after controlling for a variety of other demographic and institutional factors, HIP participation is a significant predictor of future career plans and attainment. The findings are discussed in the context of the Chaos Theory of Careers (Pryor & Bright, 2003), which emphasizes the role of multiple influences and chance, as well as acknowledging nonlinear paths in career advising and development. HIP participation can give students a career-related advantage through transferable skill development, engaging in learning opportunities, and generating “stories” for potential employers.

*Keywords:* high-impact practices, career outcomes, survey, higher education

## Focus on the Finish Line: Does High-Impact Practice Participation Influence Career Plans and Job Attainment?

Although the economy is slowly recovering from recession, funding for higher education continues to be cut in many states (Thomason, 2015) and there is an increasing requirement that colleges and universities show evidence of their effectiveness (Kuh & Ewell, 2010). Gathering post-graduation plans and career information from graduates is one important avenue of assessing institutional effectiveness (Cabrera, Weerts, & Zulick, 2005). One of the primary goals of higher education is to prepare students to become contributing members of society, in particular the workforce, upon graduation. Therefore, a major claim of success for an institution involves the employment of its graduates. However, there are many aspects of the college experience that may influence career plans and job attainment for students, including student demographics and background, extra-curricular and co-curricular activities, academic major, and further education.

Recent research suggests that many college graduates, across a variety of institutional types, are not well prepared for entering the workforce, which is problematic for both higher education and potential employers (Polk-Lepson Research Group, 2014). Institutions claim to prepare their students with a multitude of skills, ranging from effective communication practices to analytical and creative thinking skills, in addition to the pure content knowledge gained from a student's selected major (Stasz, 2001; Tait & Godfrey, 1999). If institutions are lacking in providing students with the appropriate skills and career training, the employability of their graduates will decrease (Evers, Rush, & Berdrow, 1998). Furthermore, there are a variety of experiences that, while not necessarily part of course requirements for graduation, may be able to make a positive contribution in terms of a student's career readiness.

One such example of these positive educational experiences is participation high-impact practices. Kuh (2008) recognized several engagement practices as being remarkably effective in promoting learning, development, and persistence among students. Programs such as learning communities, service learning, undergraduate research with faculty, internships, senior capstone projects or culminating experiences, and study abroad were recognized as high-impact practices (HIPs) due to their positive connection with key educational outcomes as well as the mutual qualities that influence their effectiveness. Although they may vary in their specific operations from one institution to another, generally HIPs require a considerable amount of students' time and effort, structured opportunities for reflection and integrative thinking, substantive feedback from faculty, opportunities for learning outside of the classroom, meaningful contacts with faculty and peers, and interactions with diverse others (Kuh, 2013). Furthermore, college experiences like these can serve to "blur the boundaries between students' academic and out-of-class lives" (Terenzini, Pascarella, & Bliming, 1996, p. 158), making them more educationally compelling and increasing the social and cognitive impact.

It is also possible that students who participate in HIPs may integrate these experiences either directly or indirectly into their career readiness. Perhaps internships can provide useful connections during a job search, and develop a network of resources and references for the intern once he/she begins the job search in earnest. Certain internships may even result in an eventual job offer with the company once they have been successfully completed. Students may also build knowledge of some job search strategies through a senior capstone course or culminating experience. Some of these courses include elements that further develop practical employment skills, such as mock interviews and assistance with résumé creation.

Many HIPs may also influence the development of transferable skills that are desired by employers. For instance, a study abroad experience may increase cultural awareness and tolerance, a general competency that will attract employers conducting international business. The hands-on learning that can take place within service-learning course requirements or participation in a learning community can promote the integration of abstract concepts with real-world experiences and activities, which is beneficial for many careers as well. Other HIPs may have an eventual career influence through their preparation of students to gain further knowledge in graduate school. Participating in research with a faculty member as an undergraduate may promote comprehension of data collection and interpretation in one's discipline, which will greatly assist students as they continue their education at the graduate level. Therefore, one primary goal of the current study is to explore the influence of HIPs on career plans and attainment for graduating seniors. Does participation in an HIP have a positive impact on career readiness, including graduate school attendance as well as obtaining a job to begin immediately following graduation?

### **Theoretical Framework**

In order to bridge what is currently known about the benefits of HIPs in higher education with this research question that extends to career outcomes, it may be useful to borrow a conceptual model from the career development literature. Within this field, more traditional models focus on a person-environment fit (see for example Holland, 1997; Smart, Feldman, & Ethington, 2002), emphasizing whether one's personality relates to a preference for certain types of tasks. However, these models have more recently been expanded by those that also take into account the complexities, uncertainties, and dynamic aspects of modern work, resulting in what is termed the "Chaos Theory of Careers" (Bright & Pryor, 2005). This theory emphasizes that

careers are nonlinear and recursive, meaning that elements of one's career can come from multiple influences, chance events, and can interact in a cyclical way (Pryor & Bright, 2003). For instance, someone might start his career as a logistics manager at a manufacturing facility, get laid off when the company is bought out by a larger one, but then be recruited to work as the business coordinator for the friend of a former co-worker based on his extensive spreadsheet skills that were acquired as a part of his previous job. Counseling implications of this theory advise job seekers to focus on opportunities when they make themselves available, as these experiences may seem horizontal (i.e. not directly related to one's goals) but can develop skills that may be needed in the future (Pryor, Amundson, & Bright, 2008). It is beneficial to build up a collection of "stories" to share with employers, as these can be effective in making a connection and securing employment offers (Pryor & Bright, 2006). Making a memorable impression to the individual responsible for hiring becomes increasingly important in the digital age, as online application processes make it easier to get "lost in the shuffle" of endless applications. Generating a narrative based on experiences and abilities creates a distinct advantage for job-seekers.

### **Research Question**

Participation in HIPs can be viewed as an opportunity to create a story for oneself, at the same time developing skills that may be desirable to employers. Therefore, the Chaos Theory of Careers posits that while there are many variables that play a role in career outcomes and job attainment, seizing opportunities such as HIP participation may be one positive course of action. Situating this theoretical framework in the current study leads to a research question that focuses on the potential benefits of these HIP opportunities concerning careers, while also taking into account a number of other influences that are simultaneously shaping these specific outcomes as

well. Given this context, we are interested in whether HIP participation influences plans for career and further education for graduating seniors, and whether HIP participation has a positive impact on job attainment for these students, even after controlling for a variety of other factors.

## **Methods**

### **Data Source**

This study uses data from the 2015 Senior Transitions module of the National Survey of Student Engagement (NSSE). NSSE is an annual survey administered in the spring semester to first-year and senior students at four-year colleges and universities across the country in order to assess the extent to which students are exposed to and participate in effective educational practices (McCormick, Kinzie, & Gonyea, 2013). Institutions can elect to append additional questions to the survey by selecting from several topical modules. The Senior Transitions module explores seniors' post-graduation plans, links between academic major and future plans, and confidence in skill development. We examined responses from over 31,000 seniors attending 126 baccalaureate-granting institutions. Approximately 63% of the seniors were female and 68% were traditional age (i.e., less than 25 years old). About 65% of the respondents were White, 7% were Asian/Pacific-Islander, 7% were African-American/Black, 8% were Hispanic/Latino, 7% identified as more than one race/ethnicity group, and 6% identified with another racial/ethnic group (e.g., Native American).

### **Measures**

The dependent variables were two items on the survey that asked seniors about their plans after graduation. The first item asked "After graduation, what best describes your immediate plans?" with the following response options: full-time employment, part-time employment, graduate or professional school, military service, service or volunteer activity,

internship, travel or gap year, no plans at this time, and other (with write-in response).

Approximately 60% of respondents indicated that they plan on having full-time employment after graduation with another 4% indicating part-time employment. Additionally, 23% of respondents indicated they plan to attend graduate or professional school after graduation, with the rest dispersed throughout the remaining response options (no other response option had more than 3.5% of respondents selecting that option). Given this distribution of responses, full-time and part-time employment categories were combined to create an “employed” category, and then the “employed” and “graduate school” categories were used in subsequent analyses. If a respondent indicated that he/she anticipated full-time or part-time employment, a follow-up question asked: “Do you already have a job after graduation?” with the following response options: No; Yes, I will start a new job; and Yes, I will continue in my current job.

Approximately 59% responded “No”; 15% responded “Yes, I will start a new job”; and 26% responded “Yes, I will continue in my current job.”

Our key independent variables included seven questions on the survey that ask students about their participation in various co-curricular activities. Specifically, items asked students if they have done or are in the progress of doing a learning community, study abroad, a research project with a faculty member, an internship, a culminating senior experience, a community-based project or service-learning project, and held a formal leadership role on campus. We also included several student and institutional control variables that have been shown to impact student development in college (Pascarella & Terenzini, 2005). At the student level, the variables of gender, enrollment status, race/ethnicity, age, first-generation status, grades, residence status, Greek affiliation, online learning status, academic major, time spent working, and graduate degree aspirations were collected from the demographic items on the survey. Institutional



controls included Carnegie classification, control (public vs. private), and admissions selectivity measured by *Barron's Profiles of American Colleges* (Barron's Educational Services, Inc., 2013).

## **Analyses**

To answer our research questions, we ran two logistic regression models. Binary logistic regression was used to construct a model relating students' participation in high-impact practices with students' decision to seek employment or attend graduate school after graduation. To examine the relationship between participation in high-impact practices and whether students seeking employment had secured a job after graduation, we utilized multinomial logistic regression procedures in order to model the relationship across the three response categories (No; Yes, I will start a new job; and Yes, I will continue in my current job). In this analysis, one category has to serve as a reference group in which the other two categories will be compared. In order to examine all pairwise comparisons among the response options, we ran the model twice, changing the reference category. Categorical control variables in all of the logistic regression models were dummy-coded (see Appendix A). Finally, given the nested structure of our data (students with institutions), we used random-intercept multilevel models to provide more accurate statistical significance results.

## **Results**

### *Logistic Regression*

Results from the binary logistic regression analysis modeling students' propensity to seek employment or attend graduate school are provided in Table 1. These results indicate that seniors who participated in an internship had 25% greater odds of seeking employment after graduation than senior who did not participate in an internship. Seniors who had performed a leadership role

on campus had 23% greater odds of attending graduate school than their counterparts who were not in a leadership role. Students who had completed a culminating senior experience had about 22% greater odds of planning to seek employment after graduation. Participating in a study abroad opportunity increased the odds of seeking employment by a factor of 1.12. Students who participated in research with a faculty member had 65% greater odds of planning to attend graduate school. Participation in a learning community and service learning did not have a statistically significant effect on students' plans to attend graduate school or seek employment.

In regards to the control variables in the model, full-time students and traditional age students had greater odds of attending graduate school than their part-time and non-traditional counterparts. Seniors who lived on-campus had greater odds of attending graduate school than those who lived off-campus. Students who identified as Asian/Pacific Islander, Black/African-American, or Hispanic/Latino were more likely to report planning to attend graduate school than their White counterparts. Similarly, international student were more likely to report planning to attend graduate school than their domestic counterparts. Not surprisingly, students who reported grades of mostly A's were nearly twice as likely as those who reported earning grades of mostly B's or C's to plan to attend graduate school. Students majoring in the fields of Business, Communications, Education, and Engineering had more than two times greater odds of planning to seek employment than similar students majoring in Arts and Humanities while students majoring in Biological Sciences and Social Sciences were had greater odds of seeking employment. Also as expected, students who reported having an aspiration for eventually obtaining a graduate degree were over eight times as likely to plan on attending graduate school, making this an important control variable in the model. It should further be noted that when

examining these variables in a separate OLS regression model to check for multicollinearity, all VIF values were below three, suggesting that multicollinearity was not an issue (Field, 2009).

### *Multinomial Regression*

Results from the multinomial logistic regression modeling the job status of students seeking employment after graduation can be found in Tables 2, 3, and 4. We first present the results modeling the relationship between those who did not have a job after graduation and those who will start a new job (Table 2). Seniors who had done an internship had almost two and a half times greater odds of starting a new job than those who did not do an internship. Students whose courses included a service learning component and those who completed a capstone course had between 16% and 45% greater odds, respectively, of starting a new job. None of the other high-impact practices were statistically significant when modeling the relationship between those who did not have a job and those who will start a new job. Again, earning higher grades and academic major were significant contributors to whether students reported having a job after graduation. Specifically, students majoring in Business, Engineering, and Physical Sciences were more likely than students majoring in Arts and Humanities to start a new job after graduation. On the other hand, students majoring in Communications and Education were less likely to report starting a new job after graduation than students majoring in Arts and Humanities. Male students and those attending school full-time were more likely to report starting a new job after graduation than their female and part-time counterparts. Additionally, the more time students spent working during the current school year, the greater their odds of starting a new job.

Modeling the relationship between those who did not have a job after graduation and those who will continue in their current job (Table 3), we find that students who completed an

internship and students who completed a senior capstone project had between 24% and 30% greater odds, respectively, of continuing in their current job than those who did not complete these activities. On the other hand, students who held a formal leadership position, participated in a learning community, participated in study abroad, or completed a service-learning project had between 20% and 30% greater odds of reporting they did not have a job after graduation, compared with continuing in their current job. Part-time students were over twice as likely to report continuing in their current job compared with full-time students. Student over 23 years old were 67% more likely continue in their current job compared with traditional age students. Additionally, students who lived-off campus and who took some of their coursework online were more likely to continue in their current job. Arts and Humanities majors were more likely to continue in their current job than otherwise similar Physical Science, Education, Engineering, or Social Service majors. On the other hand, Business majors were more likely than Arts and Humanities majors to continue in their current job.

Comparing the relationship between those who will continue in their current job and those who will start a new job, we find that completing an internship was associated with increasing the odds of starting a new job after graduation by a factor of 1.93. Holding a formal leadership position increased the odds of starting a new job by a factor of 1.46. Additionally, completing a service learning project and participating in a learning community increased the odds of starting a new job by over 30%. Completing a research project with a faculty member increased the odds of starting a new job by 13%. Male students and seniors attending school full-time were more likely to report starting a new job after graduation. Traditional age students were about twice as likely to report starting a new job after graduation compared with otherwise similar older students. Students who lived on-campus, were members of a Greek organization,

or held eventual graduate degree aspirations were around 20% more likely to start a new job after graduation. Students majoring in Physical Sciences, Business, Education, and Engineering were more likely than students majoring in Arts and Humanities to report starting a new job after graduation. On the other hand, those who spent more time working were more likely to report continuing in their current job.

### **Discussion**

When examining the results from this study, as the previous literature has suggested we find that high-impact practices appear to have positive effects on educational outcomes (Kuh, 2013). In this case, the educational outcomes are employment or graduate school attendance after graduation. Of particular interest is that the results from this study suggest that which HIPs students choose can matter depending on the desired post-graduation pathway. In particular, participating in internships, capstones, or service learning increases students' likelihood of having a job when graduating. Conversely, leadership experiences or research with faculty has a positive effect on students' plans to continue their education by going to graduate school.

Not surprisingly, the findings indicate that students who wish to go on to graduate school should do research with faculty. Gaining valuable research skills prior to entering graduate school can be a real benefit. In addition, it may also be the case that students who plan on going to graduate school are more likely to have interest in doing research. Finally, more research opportunities are available in certain disciplines. These fields, such as biological sciences and certain social sciences like psychology, are also the fields that are more likely to encourage students to go to graduate school. Yet even after controlling for the differences by major, the effect of research with faculty on graduate school attendance is strong.

Students with leadership experiences on campus also seem to be headed on the path to graduate school. Leadership on campus might be tied to general success on campus, such as good grades, which we also see leads to graduate school enrollment. Those students who are getting involved with campus activities in profound ways seem to want to continue their educational experiences. Students who are having these positive experiences on campus may have more confidence in their potential performance in graduate school and thus are more likely to enroll.

Perhaps intuitively, participation in an internship increases the likelihood that a student will have plans to start a new job after graduation more than any other HIP and more than most of the control variables in the models. This finding can be linked to previous studies that connect internships with increased chances of getting career-oriented jobs upon graduation (Callanan & Benzing, 2004; Coco, 2000). Internships give students real-life experiences in their field, which increases their marketable skills and the stature of their résumé. Internships also provide students with direct connections in their field and opportunities for networking. Internship proponents emphasize the substantial importance of such experiences, calling them “inarguably, the most valuable experience of today’s college student” (Berger, 2012, p. 5).

In addition to internships, senior capstones often result in real-world experiences for the graduating student and also a higher likelihood for employment. Many senior capstones are courses where actual companies, local government agencies, or local organizations come into the classroom and give students real-world problems to discuss and solve. For example, a company might come into the classroom and have student groups give them possible design campaigns for a new product or a local government agency might have students help develop ideas for some new green space. These projects are usually tied to the discipline and thus give some hands-on

experience in their chosen field. Additionally, these courses can also be networking experiences in some occasions, as well as provide general job-search information such as interviewing and résumé-writing tips. These courses can link what the student has been learning during the educational experience to the skills and abilities that they will need for their careers.

Finally, the last HIP that connects the educational experience to hands-on experiences and a higher probability for employment after graduation is service learning. Service-learning projects have been shown to improve students' abilities to apply what they have learned in college to situations in the real-world (Cohen & Kinsey, 1994; Eyler & Giles, 1999; Eyler, Giles, Stenson, & Gray, 2001). Thus, this association between their coursework and the application of the coursework in the real-world leads to higher likelihood of employment for students who participate in service-learning as part of one of their courses.

These results are encouraging for institutions seeking to show evidence of their effectiveness, particular as it relates to the offering of HIPs for students. These positive career-related outcomes can justify devoting financial and personnel resources to ensure that all students have options for HIP participation. As the Chaos Theory of Careers (Pryor & Bright, 2003) emphasizes multiple influences, chance, and nonlinear paths, participation in HIPs and the associated skills that result from these experiences could certainly provide career-related benefits. An internship with a particular company might seem horizontal because the student is unpaid and only fulfilling a course credit, but it might lead to opportunities through a later job offer from a contact at the internship site. Study abroad, leadership roles, and service-learning could develop desired transferable skills, such as cultural awareness, interpersonal skills, and relational empathy that will be greatly valued by future employers. A student might generate several "stories" to share in their search for a job or application to graduate school, explaining

how their passion for a certain topic was ignited through a theme-based learning community or the process and results of conducting research under the guidance of a faculty member.

### **Limitations**

There are several limitations to this study that must be considered when interpreting the results and generalizing the findings. First, although the sample is comprised of a wide range of students attending multiple institutions, it is not representative of all students at four-year colleges and universities in the United States. While all seniors at participating institutions were invited to participate, students self-select to participate in the study as well as in the HIPs of interest. Additionally, individual colleges and universities elect to participate in NSSE for a variety of reasons, mainly for institutional improvement, which may impact the context of the student experience. This study also relied on self-reported behaviors, which may not be completely objective. However, most studies looking at student self-reports in higher education suggest that self-reports and actual abilities are positively related (Anaya, 1999; Hayek, Carini, O'Day, & Kuh, 2002; Laing, Swayer, & Noble, 1988; Pace, 1985; Pike, 1995). Furthermore, previous research suggests that social desirability bias does not play a major role in the responses of students for self-report surveys of basic academic behaviors (Miller, 2012). While the results should be interpreted with caution, this study still provides insight into the influence that participation in HIPs might have on seniors' post-graduation plans.

### **Conclusion**

This study adds to the already copious research studies that support the need to encourage students to participate in high-impact practices. In addition, these findings add nuance to the known effects of particular HIPs on students' career and educational aspirations. If students participate in certain HIPs, such as internships, senior capstones, learning communities, and



service learning, students are indeed more likely to have a job when graduating. Alternately, other HIPs, such as leadership experiences and research with faculty, may lead to students continuing their education in graduate school. Greater understanding of these differences gives faculty, advisors, and administrators support for encouraging student HIP participation for those that most closely align with their future career and educational goals.

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Table 1: Logistic regression predicting employment vs. graduate school attendance

	Coefficient	S.E.	Odds Ratio <sup>1</sup>	95% CI for Odds Ratio		
				Lower	Upper	
Internship	-0.22	0.047	0.80 (1.25)	0.73	0.88	***
Leadership	0.20	0.046	1.23	1.12	1.34	***
Learning Community	-0.05	0.053	0.95 (1.05)	0.86	1.06	
Study Abroad	-0.11	0.056	0.89 (1.12)	0.80	1.00	*
Research with Faculty	0.50	0.045	1.65	1.52	1.81	***
Capstone	-0.20	0.056	0.82 (1.22)	0.73	0.91	***
Service Learning	-0.04	0.030	0.96 (1.04)	0.91	1.02	
Male	0.14	0.078	1.15	0.99	1.34	
Full-time	0.37	0.064	1.44	1.27	1.63	***
Asian/Pacific Islander	0.25	0.075	1.29	1.11	1.49	***
Black/African-American	0.50	0.077	1.65	1.42	1.92	***
Hispanic/Latino	0.20	0.070	1.22	1.07	1.40	**
Multiracial	0.15	0.066	1.16	1.02	1.32	*
Other race/ethnicity	0.09	0.075	1.10	0.95	1.27	
International Student	0.29	0.129	1.34	1.04	1.72	*
Traditional Age	0.23	0.054	1.26	1.13	1.40	***
First Generation	-0.08	0.035	0.92 (1.09)	0.86	0.99	*
Mostly B's	-0.42	0.045	0.66 (1.52)	0.60	0.72	***
Mostly C's	-0.69	0.102	0.50 (1.99)	0.41	0.61	***
Living on-campus	0.17	0.048	1.18	1.08	1.30	***
Greek Member	-0.07	0.057	0.93 (1.07)	0.83	1.04	
Some online courses	-0.01	0.050	0.99 (1.01)	0.90	1.09	
Biological Sciences	0.83	0.086	2.28	1.93	2.70	***
Physical Sciences	-0.03	0.076	0.97 (1.03)	0.84	1.13	
Social Sciences	0.28	0.073	1.33	1.15	1.53	***
Business	-1.13	0.122	0.32 (3.10)	0.25	0.41	***
Communications	-0.91	0.136	0.40 (2.49)	0.31	0.53	***
Education	-1.52	0.156	0.22 (4.59)	0.16	0.30	***
Engineering	-0.92	0.120	0.40 (2.50)	0.32	0.51	***
Health Sciences	-0.21	0.134	0.81 (1.24)	0.62	1.05	
Social Services	0.15	0.091	1.16	0.97	1.39	
Other Majors	-0.45	0.104	0.64 (1.57)	0.52	0.78	***
Time spent working	-0.01	0.002	0.99 (1.01)	0.99	0.99	***
Graduate degree aspirations	2.11	0.093	8.24	6.87	9.89	***
Carnegie: Doctoral	0.19	0.124	1.21	0.94	1.55	
Carnegie: Master's	0.15	0.105	1.16	0.94	1.43	
Carnegie: Other	-0.61	0.347	0.54 (1.84)	0.27	1.08	
Private institution	-0.04	0.086	0.96 (1.04)	0.81	1.14	
Barron's selectivity index	-0.04	0.036	0.96 (1.04)	0.89	1.03	
Constant	-1.50	0.047				***

<sup>1</sup>Parentheses indicate inverse odds ratios for negative coefficients  
 Cox and Snell Pseudo R-square .22; Nagelkerke Pseudo R-square .32; 78.6% correctly classified

Table 2: Multinomial logistic regression predicting No vs. Yes, I will start a new job

	Coefficient	S.E.	Odds Ratio <sup>1</sup>	95% CI for Odds Ratio		
				Lower	Upper	
Internship	0.87	0.082	2.38	2.03	2.79	***
Leadership	0.09	0.060	1.10	0.97	1.23	
Learning Community	0.11	0.056	1.12	1.00	1.25	
Study Abroad	-0.06	0.070	0.94 (1.06)	0.82	1.08	
Research with Faculty	0.09	0.054	1.09	0.98	1.21	
Capstone	0.40	0.076	1.49	1.29	1.73	***
Service Learning	0.15	0.048	1.16	1.05	1.27	**
Male	0.39	0.064	1.47	1.30	1.67	***
Full-time	-0.21	0.083	0.81 (1.24)	0.69	0.95	*
Asian/Pacific Islander	0.05	0.088	1.05	0.88	1.25	
Black/African-American	-0.05	0.112	0.95 (1.05)	0.76	1.18	
Hispanic/Latino	0.05	0.085	1.05	0.89	1.24	
Multiracial	-0.10	0.084	0.90 (1.11)	0.77	1.07	
Other race/ethnicity	-0.01	0.122	0.99 (1.01)	0.78	1.26	
International Student	0.16	0.182	1.17	0.82	1.67	
Traditional Age	0.15	0.089	1.16	0.98	1.38	
First Generation	0.01	0.050	1.01	0.92	1.12	
Mostly B's	-0.15	0.061	0.86 (1.17)	0.76	0.97	*
Mostly C's	-0.46	0.125	0.63 (1.59)	0.49	0.80	***
Living on-campus	-0.09	0.068	0.91 (1.10)	0.80	1.04	
Greek Member	0.16	0.074	1.17	1.02	1.36	*
Some online courses	0.21	0.062	1.24	1.10	1.40	***
Biological Sciences	0.16	0.160	1.18	0.86	1.61	
Physical Sciences	0.34	0.162	1.40	1.02	1.92	*
Social Sciences	0.12	0.115	1.13	0.90	1.42	
Business	0.71	0.159	2.02	1.48	2.77	***
Communications	-0.35	0.160	0.71 (1.41)	0.52	0.97	*
Education	-0.74	0.135	0.48 (2.10)	0.37	0.62	***
Engineering	0.42	0.151	1.52	1.13	2.04	**
Health Sciences	0.09	0.129	1.10	0.85	1.41	
Social Services	-0.23	0.168	0.79 (1.26)	0.57	1.10	
Other Majors	0.39	0.213	1.47	0.97	2.23	
Time spent working	0.02	0.003	1.02	1.02	1.03	***
Graduate degree aspirations	0.04	0.053	1.04	0.94	1.15	
Carnegie: Doctoral	-0.36	0.114	0.70 (1.43)	0.56	0.87	**
Carnegie: Master's	-0.34	0.095	0.71 (1.40)	0.59	0.86	***
Carnegie: Other	0.52	0.424	1.68	0.72	3.88	
Private institution	-0.26	0.092	0.77 (1.30)	0.64	0.92	**
Barron's selectivity index	0.15	0.039	1.16	1.07	1.25	***
Constant	-1.56	0.052				***

<sup>1</sup>Parentheses indicate inverse odds ratios for negative coefficients

Cox and Snell Pseudo R-square .33; Nagelkerke Pseudo R-square .39; 69.1% correctly classified

Table 3: Multinomial logistic regression predicting No vs. Yes, I will continue in my current job

	Coefficient	S.E.	Odds Ratio <sup>1</sup>	95% CI for Odds Ratio		
				Lower	Upper	
Internship	0.21	0.076	1.24	1.07	1.43	**
Leadership	-0.29	0.076	0.75 (1.33)	0.65	0.87	***
Learning Community	-0.18	0.089	0.83 (1.20)	0.70	0.99	*
Study Abroad	-0.20	0.077	0.82 (1.22)	0.70	0.95	**
Research with Faculty	-0.03	0.065	0.97 (1.03)	0.85	1.10	
Capstone	0.26	0.057	1.30	1.17	1.46	***
Service Learning	-0.21	0.046	0.81 (1.23)	0.74	0.89	***
Male	-0.05	0.047	0.95 (1.05)	0.87	1.04	
Full-time	-0.89	0.102	0.41 (2.43)	0.34	0.50	***
Asian/Pacific Islander	-0.35	0.087	0.71 (1.41)	0.60	0.84	***
Black/African-American	-0.12	0.078	0.89 (1.12)	0.77	1.04	
Hispanic/Latino	-0.05	0.086	0.95 (1.05)	0.80	1.13	
Multiracial	0.06	0.102	1.06	0.87	1.29	
Other race/ethnicity	-0.12	0.095	0.88 (1.13)	0.73	1.07	
International Student	-0.79	0.184	0.45 (2.21)	0.32	0.65	***
Traditional Age	-0.51	0.091	0.60 (1.67)	0.50	0.71	***
First Generation	0.07	0.048	1.07	0.98	1.18	
Mostly B's	-0.19	0.057	0.82 (1.21)	0.74	0.92	***
Mostly C's	-0.37	0.089	0.69 (1.45)	0.58	0.82	***
Living on-campus	-0.32	0.085	0.73 (1.37)	0.62	0.86	***
Greek Member	-0.05	0.082	0.95 (1.05)	0.81	1.12	
Some online courses	0.46	0.084	1.58	1.34	1.86	***
Biological Sciences	-0.08	0.141	0.92 (1.09)	0.70	1.21	
Physical Sciences	-0.33	0.138	0.72 (1.39)	0.55	0.94	*
Social Sciences	-0.06	0.132	0.94 (1.07)	0.72	1.22	
Business	0.22	0.098	1.25	1.03	1.51	*
Communications	-0.26	0.15	0.77 (1.30)	0.58	1.03	
Education	-1.25	0.132	0.29 (3.49)	0.22	0.37	***
Engineering	-0.59	0.151	0.56 (1.80)	0.41	0.75	***
Health Sciences	-0.23	0.205	0.79 (1.26)	0.53	1.19	
Social Services	-0.43	0.162	0.65 (1.54)	0.47	0.89	**
Other Majors	-0.22	0.118	0.81 (1.24)	0.64	1.02	
Time spent working	0.08	0.003	1.08	1.07	1.09	***
Graduate degree aspirations	-0.15	0.055	0.86 (1.16)	0.77	0.96	**
Carnegie: Doctoral	0.02	0.183	1.02	0.71	1.46	
Carnegie: Master's	0.04	0.111	1.04	0.84	1.30	
Carnegie: Other	-0.37	0.322	0.69 (1.45)	0.36	1.30	
Private institution	0.21	0.11	1.23	0.99	1.53	
Barron's selectivity index	0.01	0.039	1.01	0.93	1.09	
Constant	-1.42	0.055				***

<sup>1</sup>Parentheses indicate inverse odds ratios for negative coefficients



Table 4: Multinomial logistic regression predicting Yes, I will continue in my current job vs. Yes, I will start a new job

	Coefficient	S.E.	Odds Ratio <sup>1</sup>	95% CI for Odds Ratio		
				Lower	Upper	
Internship	0.66	0.065	1.93	1.70	2.19	***
Leadership	0.38	0.083	1.46	1.24	1.72	***
Learning Community	0.29	0.077	1.34	1.15	1.56	***
Study Abroad	0.14	0.097	1.15	0.95	1.39	
Research with Faculty	0.12	0.062	1.13	1.00	1.28	*
Capstone	0.14	0.069	1.14	1.00	1.31	
Service Learning	0.36	0.059	1.43	1.27	1.60	***
Male	0.44	0.065	1.55	1.36	1.76	***
Full-time	0.68	0.137	1.97	1.51	2.57	***
Asian/Pacific Islander	0.39	0.102	1.48	1.21	1.81	***
Black/African-American	0.06	0.129	1.07	0.83	1.37	
Hispanic/Latino	0.10	0.114	1.10	0.88	1.38	
Multiracial	-0.16	0.125	0.85 (1.17)	0.67	1.09	
Other race/ethnicity	0.12	0.114	1.12	0.90	1.41	
International Student	0.95	0.205	2.59	1.73	3.87	***
Traditional Age	0.66	0.089	1.94	1.63	2.32	***
First Generation	-0.06	0.052	0.94 (1.06)	0.85	1.04	
Mostly B's	0.04	0.075	1.04	0.90	1.21	
Mostly C's	-0.09	0.124	0.91 (1.10)	0.71	1.16	
Living on-campus	0.23	0.093	1.25	1.04	1.51	*
Greek Member	0.21	0.098	1.23	1.02	1.49	*
Some online courses	-0.24	0.084	0.79 (1.27)	0.67	0.93	**
Biological Sciences	0.24	0.164	1.28	0.93	1.76	
Physical Sciences	0.67	0.195	1.95	1.33	2.86	***
Social Sciences	0.19	0.158	1.20	0.88	1.64	
Business	0.48	0.169	1.62	1.17	2.26	**
Communications	-0.09	0.186	0.91 (1.09)	0.64	1.32	
Education	0.51	0.167	1.67	1.20	2.31	**
Engineering	1.01	0.170	2.73	1.96	3.82	***
Health Sciences	0.32	0.200	1.38	0.94	2.05	
Social Services	0.20	0.220	1.22	0.80	1.88	
Other Majors	0.60	0.244	1.83	1.13	2.95	*
Time spent working	-0.05	0.004	0.95 (1.05)	0.94	0.96	***
Graduate degree aspirations	0.19	0.074	1.20	1.04	1.39	*
Carnegie: Doctoral	-0.38	0.180	0.68 (1.46)	0.48	0.98	*
Carnegie: Master's	-0.38	0.134	0.68 (1.46)	0.52	0.89	**
Carnegie: Other	0.89	0.361	2.43	1.19	4.98	*
Private institution	-0.47	0.129	0.63 (1.60)	0.48	0.81	***
Barron's selectivity index	0.14	0.044	1.15	1.05	1.26	**
Constant	-0.15	0.059				*

<sup>1</sup>Parentheses indicate inverse odds ratios for negative coefficients

## Appendix A

Variable	Description
Gender <sup>a</sup>	0 = Female; 1 = Male
Enrollment status <sup>a</sup>	0 = Part-time; 1 = Full-time
Race or ethnicity	Asian/Pacific Islander; Black/African American; Hispanic/Latino; Multiracial; Other race or ethnicity; White <sup>b</sup>
Age (Traditionally-aged) <sup>a</sup>	0 = Older than 23; 1 = 23 or younger
First-generation status <sup>a</sup>	0 = At least one parent earned a college degree or attended some college; 1 = Neither parent attended college
Earned college grades	Mostly A's <sup>b</sup> ; Mostly B's; Mostly C's
Residence status <sup>a</sup>	0 = lived off campus; 1 = lived on campus
Greek affiliation (Member of fraternity or sorority) <sup>a</sup>	0 = No; 1 = Yes
Online learning <sup>a</sup>	0 = No online courses; 1 = Some online courses
Academic major	Arts & Humanities <sup>b</sup> ; Biological Sciences; Business; Communications, Media, & Public Relations; Education; Engineering; Health Professions; Physical Sciences; Social Sciences; Social Service Professionals; Other Majors
Time spent working	How much time do you spend working for pay on and off campus?
Graduate degree aspirations <sup>a</sup>	0 = No; 1 = Yes
Carnegie classification	Doctoral-Research; Master's; Baccalaureate <sup>b</sup> ; Other Carnegie
Institutional Control <sup>a</sup>	0 = Public; 1 = Private
Barron's selectivity index	1=Noncompetitive to 6=Most competitive

<sup>a</sup> Coded as a dichotomous variable (0 = not in group; 1 = in group)

<sup>b</sup> Reference group