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The Employment Impacts of Service-Learning Classes

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Introduction

➤ A large-scale movement is underway in higher education to incorporate academic service-learning experiences into the curriculum. Service-learning (SL) courses engage students with the community, allowing them to apply what they are learning about to real-world, community-identified problems or issues. Bringle & Hatcher (1995) define academic service-learning as:

“a course-based, credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs, and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility.”

➤ Research across a range of disciplines and institutional contexts has shown this pedagogy's positive effects on student outcomes such as personal and civic development, critical thinking, intercultural competence, and more (Clayton, Bringle, & Hatcher, 2013; Eyler & Giles, 1999); likewise, it has been shown to increase student learning beyond the effects of traditional pedagogy (Warren, 2012), and is considered an empirically validated “high-impact educational practice” (Kuh, 2008).

➤ SL courses are increasingly available to students; Campus Compact's annual survey of member institutions found that 95% of responding campuses offered service-learning courses, averaging 66 courses per campus, with 64% of the campuses requiring SL in at least one major (Campus Compact, 2013).



Figure 1. In service-learning courses such as this horticulture class, students put knowledge to use to improve the community***

Objective

➤ Taking part in SL has been shown to have some influence on what careers students choose (e.g., Warchal & Ruiz, 2004). The hands-on, experientially-oriented nature of service-learning, as well as SL's potential development of workforce skills such as teamwork and project management, have been hypothesized to give students experiences that might help them find jobs more rapidly or at higher wages.

➤ Despite these anecdotal claims, there are no empirical studies of the benefits of such courses in terms of employment and earning outcomes for students. This study addresses that gap through examination of self-reported employment records from a survey of college graduates, two years after graduation.

➤ The hypothesis to be tested is that students who take service-learning classes will have advantages in employment outcomes, such as shorter time to first employment and higher earnings, when compared to peers who did not take SL.



Figure 2. Service-learning engages students locally and internationally***

Data

➤ The study uses the results of a survey sent to a sample of about 2,000 alumni who graduated with an undergraduate degree in any major from The University of Georgia (UGA) in 2010.

Institutional enrollment records were used to determine whether students had enrolled in any service-learning (SL) courses.

➤ The survey, completed during summer 2013, asked respondents to indicate whether they sought and received employment upon graduation, their starting salary, and subsequent employment and pay raises, among other information.

➤ 447 valid responses (of 568 total) were returned; after eliminating students who went to graduate school or did not seek employment after college, 276 respondents comprised the data sample: 78 who had not taken SL courses and 198 who had. Figure 3 lists some facts of this sample.

➤ Matched pairs were created to reduce potential disparities in outcomes based on major, gender, and academic performance (see next section).

➤ Participants responded to prompts on an online survey which asked them to self-report employment information such as their starting salary, how long it took them to find their first job, how long it took them to receive a raise or a promotion, whether their job was full-time or part-time, whether it was in their area of interest, among other questions.



Figure 3. Summaries of selected variables in the data

Methods

Unique Matching

➤ Respondents who took undergraduate service-learning classes at UGA were paired with those who did not take service-learning classes but were otherwise as similar as possible.

➤ In order to minimize potential sample selection bias, pairs were created with a matching algorithm requiring the same graduation semester/year, same major, and same gender. Additionally, matches were prioritized for minimizing differences between ethnicity, SAT total score, and college GPA. Each member of a pair was matched with the closest pair possible, and each was matched only one time. Thus, not all respondents were matched into a pair for analysis.

➤ The students in each resulting pair had the same gender and college major, graduated the same semester, and had less than a 0.8 difference on their overall college GPA (4.0 scale) and a total SAT score difference less than 250 (of 1600).

➤ 44 unique pairs resulted and were used for our analysis.

Hypothesis Testing

➤ The research hypotheses were tested via paired-sample, 1-tailed t-tests on the difference in the means for each self-reported outcome variable of interest: starting salary; months to first employment; months to first raise (if any); months to first promotion (if any). Two tailed proportion tests are also performed to detect the possible differences on proportions of graduates in each category who reported that their first job was in their desired field; that their first job was full-time; that they received a raise at all; or that they were promoted.

Results

➤ No statistically significant differences emerged between those taking SL and those who did not on how quickly they became employed or received a promotion, and on the proportion of those in each category who received a raise, received a promotion, or took their first job in their desired field.

➤ The starting salary of graduates with SL was significantly higher than their non-SL counterpart, by an average of over \$6,500.

➤ Those with SL also received a raise significantly more quickly—more than two months faster than those without SL experience.

➤ A higher proportion of those with SL reported a full-time job.

Table 2. Mean, SD, and results for outcome variables of interest

T-Test (df)	Group	Mean	Std. Dev	P (1-tailed)
Starting salary t=-2.21 (38)	Non SL	33987	13908	0.017*
	SL	40518	18468	
Months to get hired t=1.24 (38)	Non SL	4.92	7.45	0.11
	SL	2.92	5.85	
Months to first raise t=1.33 (15)	Non SL	11.31	5.23	0.10*
	SL	8.75	5.34	
Months to first promotion t=-0.25 (5)	Non SL	14.33	5.89	0.59
	SL	15.67	10.42	
Proportion Test	Group	Mean	Std. Dev	P (1-tailed)
Job in desired field z=-0.98	Non SL	0.64	0.077	0.16
	SL	0.74	0.699	
Full time job z=-1.49	Non SL	0.85	0.058	0.068*
	SL	0.95	0.035	
Received raise z=1.44	Non SL	0.74	0.069	0.93
	SL	0.59	0.079	
Received promotion z=0.00	Non SL	0.38	0.078	0.5
	SL	0.38	0.078	

Discussion

➤ The employment-related impacts of taking service-learning coursework, for our sample of 2010 graduates, appear to manifest mostly in terms of initial employment outcomes. Specifically, graduates with SL who sought jobs appear to have gotten full-time (rather than part-time) jobs at a higher rate than those without SL, and their starting salaries were higher on average. There was a trend towards quicker hiring as well. Graduates with SL experience who received raises also got those slightly sooner (about 2.5 months faster) than those without SL, but, those with SL did not seem to have an overall advantage in terms of whether they eventually got promoted or got a raise.

➤ This suggests that employers particularly valued the skills or experiences which applicants with service-learning brought to the hiring table. However, further research investigating employers' perspectives would help clarify this.

Limitations and Conclusions

➤ This study is based on a snapshot of a single year's graduates from a single university, and relies on self-reported data from respondents who may or may not be representative of all majors and disciplines (including majors where all graduates might have been required to take SL, for instance). Matched pairs were made on key variables of hypothesized importance, but not all differences between respondent pairs were controlled. While we believe that two years post graduation is sufficient time to investigate outcomes relating to initial job placement, many respondents continued to graduate school or otherwise did not initially seek employment. Also, we did not attempt to ascertain whether the particular SL experience that respondents had was relevant to their discipline or job.

➤ However, this study's strengths include its investigation of outcomes beyond short-term impacts; its inclusion of a wide range of disciplines; and close matching of key variables for respondent pairs, to maximize comparisons and minimize bias.

➤ This study helps validate university and student investment in service-learning coursework beyond the pedagogy's demonstrated impacts on student social, cognitive, and civic outcomes, providing the first empirical estimates of the economic benefits of service-learning classes for students upon entering the job market.

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***Pictures taken from UGA Office of Service-Learning website: <http://servicelearning.uga.edu/>