

ABSTRACT

Community service-learning is a “high impact” teaching strategy that responds to contemporary challenges facing higher education. Some faculty, however, remain reluctant to use service-learning in their courses because they believe it does not fit into busy student schedules, given increases in the percentage of employed students and increases in their average number of hours worked per week. This study was undertaken to determine if students’ views of the learning they derived from community service-learning were affected by their employment. Students (N = 173) from two universities completed a survey at the end of their service-learning courses, where they reported both the number of hours they work on average per week and their perceptions of service-learning. The main findings were: a) students’ perceptions of service-learning were not adversely affected by their employment; b) the overwhelming majority of students reported very positive perceptions of service-learning; and c) although first-generation students of color (but not first-generation white students) worked significantly more than non-first-generation students, they reported positive perceptions of service-learning consistent with the overall sample. These findings support service-learning as a valuable teaching-learning strategy in college courses for all students, including those who work significant numbers of hours per week.

Student Employment and Perceptions of Service-Learning

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U.S. higher education faces significant challenges in accomplishing its goals of preparing graduates for success in the civic, professional, and personal dimensions of life (Geary Schneider, 2011). A growing number of leaders in higher education (e.g., Humphreys & Carnevale, 2010; Pusser, 2010) insist that, while critical, preparation for professional life cannot be the sole purpose of higher education in a democracy. American higher education must also build an educated and involved citizenry. These leaders contend, against the rise of online and accelerated degree formats focused almost exclusively on preparation for specific jobs, that liberal education, civic education, and education for labor success constitute interrelated goals that are mistakenly separated from one another, to higher education’s and democracy’s peril (Sullivan, 2005; Chickering, 2008). Service-learning has been widely researched as a teaching-learning method that instructs students in academic disciplines at the same time as it educates students for civic, professional, and personal success (e.g., Zlotkowski, 1998; Kuh, 2008; Brownell & Swaner, 2010).

Academic excellence in U.S. higher education has increasingly come to be understood as involving inclusion of historically underrepresented or underserved students (Kuh, Kinzie, Cruce, Shoup, & Gonyea, 2007), designations which are variously defined but usually include some or all of the following groups: low-income students, first-generation students,

and students of color (Merisotis, 2008; Brownell & Swaner, 2010). U.S. higher education aspires to include historically underrepresented groups at the same time as it strives to improve the quality of student learning and timely completion of degrees with a credential reflective of authentic learning for all students (Geary Schneider, 2011). Unfortunately, recent large-scale research by leaders in higher education, as well as overwhelming evidence from employers, policymakers, government officials, national comparisons, and other sources and constituents (e.g., Bok, 2006; Arum & Roksa, 2011; Manning, 2011; Adelman, Ewell, Gaston, & Geary Schneider, 2011), contest the claims to excellence in learning that most universities tout, and raise critical questions about the definition, nature, and value of a college degree. Furthermore, the disappointing record of degree completion rates for all students and even worse completion rates for historically underrepresented students (Kuh et al., 2007) present more questions about the effectiveness of U.S. higher education. This criticism from multiple sources comes at a time when there is a demonstrated need for increased numbers of college-educated employees who are better prepared and qualified to catalyze and lead rapid transitions in dynamic and global political, cultural, and economic spheres as well as in technology and other emerging systems (Humphreys & Carnevale, 2010; Lumina Foundation, 2011). The multiple challenges to U.S. higher education's success prompt inquiry into teaching-learning strategies that effectively respond to the contemporary situation.

Service-Learning: A "High-Impact" Educational Practice

Service-learning has gained prominence in U.S. higher education, based upon a growing body of evidence demonstrating that it can contribute to students' readiness to assume their roles in civic, professional and personal aspects of life. (Eyler & Giles, 1999; Astin & Sax, 1998; Astin, Sax, & Avalos, 1999; Bringle, Philips, & Hudson, 2004; Gelmon, Holland, Driscoll, Spring, & Kerrigan, 2001; Munter, 2002). Extensive research on service-learning has determined that service-learning is not only an effective educational practice, but that it constitutes one of a small number of demonstrated "high-impact" educational practices, particularly for historically underrepresented student populations for whom higher education has been (and, unfortunately, continues to be) disproportionately inaccessible and/or unsuccessful (Kuh, 2008).

George D. Kuh defines a "high-impact" educational practice as an especially effective method of focusing students' attention, facilitating deep learning, and achieving personal and practical gains (Kuh, 2008) by combining proven teaching-learning methods (Kuh, 2010). High-impact practices typically include the following characteristics: demand substantial time and effort from students; require students to interact over a period of time with faculty and peers about significant issues and topics; facilitate work with diverse populations; include more frequent faculty feedback (than other strategies) about students' performance; require students to connect their learning to other settings and disciplines; and allow students to experience immediately the relevance of their learning through real-world applications (Kuh, 2008).

In addition to service-learning, investigations of other high-impact educational practices, such as first-year seminars, learning communities, writing-intensive courses, undergraduate research, and others (Brownell & Swaner, 2010) have yielded noteworthy results: These discrete practices gain even more potency by being combined (for example, for a student who takes a service-learning course as part of a learning community) and for historically underrepresented groups and those underprepared for college-level education. Kuh (2008) recommends that the most important investment colleges and universities can make "to

enhance student engagement and increase student success” is to “make it possible for every student to participate in *at least two high-impact activities* during his or her undergraduate program, one in the first year, and one taken later in relation to the major field” (p. 19). High impact teaching-learning strategies such as service-learning hold promise for addressing the significant challenges facing U.S. higher education: educating students for citizenship as well as personal and professional success; effectively educating historically underrepresented students; and promoting quality academic programs and timely degree completion.

Student Employment

Nevertheless, a barrier to use of high-impact practices such as service-learning is that, by definition, they require that students devote substantial time and effort to them. Most faculty believe that student employment over fifteen hours per week detracts from academic success (Perna, 2010), so faculty may be reluctant to assign a service-learning assignment that may not fit into students’ busy schedules. The present research study examined if employment affects students’ perceptions of service-learning as a high-impact practice.

In light of the concerns increased student employment raise, the research base regarding the relationship between employment and college learning has burgeoned. Extensive research data document the prevalence and intensity of contemporary college students’ employment (Sax, 2000 as cited in Schmidt, 2004), which could conflict with students’ ability to devote substantial time to their studies. In the introduction to her 2010 book, *Understanding the Working College Student*, Perna provides a concise overview of the prevalence and intensity of work among U.S. undergraduates, noting that more than three-fourths of undergraduates worked in 2003-2004, and that nearly half of full-time students under 25 years of age worked in 2006 (Perna, 2010). Given the changed landscape for students’ allocation of limited time, studies have investigated how much work, location of work (on- or off- campus), and what kind of work (related to major or any work) augments or detracts from learning for undergraduates in U.S. colleges and universities (e.g., Pascarella & Terenzini, 2005; King, 2003; Stern & Nakata, 1991). Others have investigated why student employment is so prevalent and how it affects college students’ academic and social development, including college persistence and time to attain a degree (Pascarella & Terenzini, 2005). Still others investigate the focus of students’ work (e.g., McKechnie et al., 2010). Employed students face multiple challenges to academic success and overall well-being. A qualitative study of working students found that “heavy, highly structured daily and weekly schedules” were prevalent, and that students engaged in careful, often stressful strategies to meet multiple demands of employers, school, families, and others (Ziskin, Torres, Hossler, & Gross, 2010, p. 76).

From their analysis of literature on student employment and college success, McCormick, Moore, and Kuh (2010) judge that methodological factors constitute a likely reason for the existing literature’s mixed findings regarding effects of work on GPA, persistence, time to degree, and other factors influencing student success. In their 2010 analysis of National Survey of Student Engagement (NSSE) data, McCormick et al. found that 46% of full-time first-year students and 75% of full-time seniors, as well as 76% of part-time first-year students and 84% of part-time seniors, were employed. They analyzed relationships between student employment and the five NSSE benchmarks of effective educational practice: academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment. For full-time first year students and seniors, work on campus is positively related to the five NSSE benchmarks of effective educational practice, with the

strongest effect for students working 20 or more hours per week on campus (though McCormick et al. acknowledge that results do not indicate if some of that on-campus work time is spent studying or engaging in other educational activities). Regarding off-campus work, the study found a modest effect between off-campus employment (regardless of number of hours worked) and most benchmarks. Comparing students reporting both on- and off-campus jobs with students reporting no work showed that work was positively related to three of the benchmarks. McCormick et al. found that working up to 10 hours per week on-campus was related to a slight increase in GPA, but that decreases in GPA were related to working both more than 20 hours per week on-campus and more than 10 hours per week off-campus. These results indicate that, contrary to many faculty's perception that work detracts from student learning and success, some work either on- or off-campus may actually be associated (though no causal relationship has been proven) with college success (McCormick et al., 2010).

Student Employment and Service-Learning

A large and growing body of research documents that curricular service-learning positively affects students' learning and sense of responsibility to engage in further community service, but most studies focus on issues other than the impact of college students' employment on their experiences of service-learning (e.g., McFarland, Miron, Mercer, & Ilustre, 2002; Astin, Vogelgesang, Ikeda, & Yee, 2000; Eyer and Giles, 1999). Existing studies on service-learning and employment found the following: Hawkins, Smith, Hawkins, & Grant (2005) note that 35% of employed social work majors at two large southwestern universities perceive their employment as interfering with study time. These students reported lower grade point averages than did other students, when controlling for other factors such as parental status, race, and age. Most existing studies examine one or a small number of courses regarding the impact of students' employment on their experiences of service-learning. Karasik's (2005) study of an introductory gerontology course found that when given the option of engaging in a 20-hour service-learning project or writing a research paper for a course, 36% of students chose the research option. Of these students, 97% reported lack of time as the major barrier to choosing service-learning and 17% cited work commitments as the reason they lacked time to engage in service. Of the students who chose the research option, 97% reported that they would consider service-learning in the future if they had the time to devote to it. Students cited the following commitments as time barriers: other academics, work, transportation and commuting, and family. These results indicate that the students in this course valued service-learning, but perception of lack of discretionary time prevented some from choosing the service-learning option (Karasik, 2005). However, the study did not report if students who chose the research option actually worked more hours than the students who chose the service-learning option. In their evaluation of the Health Professions Schools in Service to the Nation service-learning demonstration program at 19 institutions, Gelmon, Holland, Shinnamon, and Morris (1998) report that the majority of students who chose to engage in optional service-learning expressed support for optional rather than required service-learning because they were concerned quality would suffer if a course required reluctant students to serve the community. On the other hand, the majority of students in courses that required service-learning expressed support for service-learning as a required component of the curriculum because of its educational value. In their exploration of the use of service-learning in higher education for adults, Holland and Robinson (2008) address the common notion among higher education leaders that working students lack the requisite time to engage in service-learning. Contrary to this assumption, they cite higher

levels of participation in service-learning courses by employed students taking courses at a large university system (California State University System) and at a small college (Occidental College).

On a broader scale, an evaluation of 1995-1997 Corporation for National Service-funded service-learning programs found that community partners and community sites reported students' lack of time and flexibility in scheduling time to be their greatest weaknesses in providing valuable service to nonprofit organizations. This study found that 65% of students who took service-learning courses and 63% of those who did not take service-learning courses were employed part- or full-time. Service-learning courses demanded more time and writing from students than did comparison courses, which is consistent with Kuh's (2008) elaboration of the time characteristic of high-impact educational practices. Despite the increased time required by service-learning courses, over two-thirds of students in service-learning courses and 56% of those in non-service-learning courses assigned the course a rating of "above average" or better with no differences in expected or received course grades (Gray, Ondaatje, Fricker, & Geschwind, 2000).

Given perceived time barriers to students' participation in service-learning, researchers propose strategies for educators to consider in order to ensure that working and nonworking students both benefit from high-quality service-learning courses. Marienau and Reed (2008) propose that faculty planning service-learning courses for working adults should design flexible ways students can accomplish the service amidst their other responsibilities. Several authors propose that, given the prevalence and intensity of employment among students, leaders in higher education design ways that employment itself can be converted into a high-impact activity for college students (Kuh, 2008; McCormick et al., 2010) or that employment be re-conceptualized altogether in the context of higher education (Pusser, 2010). Brownell and Swaner's (2010) survey of the literature on low-income and first-generation college students in relation to service-learning found that these students participated less frequently in service-learning courses than other students, presumably due in part to their work commitments. U.S. higher education's aspiration to make college success possible for more students, combined with students' increased employment, demand further research on service-learning as a high-impact teaching-learning practice that facilitates learning for time-pressed students.

Service-Learning: An Effective Educational Practice for Working Students

The unrealized potential of American higher education, demonstrated effectiveness of service-learning as a high-impact practice, and increase in the percentage of college students who work many hours on- and off-campus combine to beg the question of how working college students perceive service-learning as a way to gain knowledge, skills and values. The authors' previous research comparing perceptions of service-learning held by students ($n = 690$) who worked more and less than 30 hours per week during Spring 2007, Fall 2007, and Spring 2008 semesters found that all student groups held a positive view of the academic value of service-learning. Students who worked more than 30 hours per week (19% of the sample) agreed more than others that service-learning enhanced their communication in real world settings and made them more marketable in their chosen profession. Students who were employed more hours also reported devoting more effort to the service-learning courses. However, students who worked less than 30 hours per week agreed more than those working more than 30 hours that combining community work with courses should be offered more frequently in academic settings. In addition to being influenced by these findings (Reed-Bouley, Poell, and Sather,

2009), we wanted to test the accuracy of the practical concern raised by some faculty at our institutions that they do not include service-learning in their courses because they do not want to overburden students who work long hours in addition to their schoolwork, given that “time is finite” (Perna, 2010, p. xvi).

The overall purpose of the present study was to measure if the average number of hours students are employed per week is related to students’ perceptions of the educational value of service-learning. Thus our first hypothesis is:

H1: The number of hours students are employed will not be related to their perceptions of service-learning. Further, due to the limited research on historically underrepresented students’ employment in relation to perceptions of service-learning (Brownell & Swaner, 2010), the researchers were interested in possible effects of student characteristics such as race and ethnicity on number of hours employed. For our purposes, historically underrepresented students include both students of color and first-generation students. Because historically underrepresented students by definition have faced more significant financial barriers to college participation than do other students (Merisotis, 2008), we posit the following two hypotheses: H2: More historically underrepresented students will be employed than white students who are not first-generation.

H3: Historically underrepresented students will report working more hours per week than white students who are not first-generation.

The limited existing research on historically underrepresented students indicates that this group finds service-learning valuable (Kuh, 2008) because many service-learning projects assist people with whom they identify (e.g., Marienau & Reed, 2008), and that service-learning can be a successful strategy for improving persistence among low-income, first-generation students (Yeh, 2010). Thus, we propose a fourth hypothesis:

H4: Historically underrepresented students will value service-learning more than do historically represented students.

Method

Participants

The sample included 173 students enrolled in service-learning courses at two metropolitan universities in the Midwest. University A is a public, co-educational university with 15,000 students, with a Carnegie classification of Doctoral/Research University and an elective classification in the category of Curricular Engagement and Outreach and Partnerships. University B is a small, private, all-female university with 1,000 students with a Carnegie classification of Basic Master’s S: Master’s Colleges and Universities (smaller programs). Eighty percent of students at University A and over 75% of students at University B are commuter (nonresidential) students, and the campuses offer institutionalized programs responsive to commuting students’ particular assets and needs. (For characteristics of a campus culture that supports working students, see Perna, 2010, p. 297). Of the students in the sample, 78.61% were from University A and 21.39% were from University B. The age of the students ranged from 19- to 54-years of age ($M = 24.10$, $SD = 5.77$), with 71.10% of the students under the age of 25. Approximately 69% were undergraduate, upper-division students. Almost 17% were graduate students. Most students (95%) were enrolled full-time and about 80% of the sample were female. The majority of the students, 81.50%, were white/non-Hispanic. The sample also included 5.78% Hispanic, 3.47% Asian-American/Pacific Islander, and 1.73% African American students, with 4.05% reporting their race/ethnicity as “Other”, and 2.31% gave no response.

Approximately 17% of the sample ($n = 29$) reported being the first person in the family to go to college. The students in the sample were enrolled in the following courses: education, information systems and quantitative analysis, journalism, marketing, public administration, social work, and special education. A possible limitation of the sample, which could be tested in future research, is that it includes mainly pre-professional courses and no courses in the liberal arts and sciences.

Both universities host programs dedicated to offering strong support for service-learning, including initial faculty training and ongoing assistance for faculty and students throughout the semester. The service-learning culture at both universities may be a limitation of the research in that our results would not necessarily be replicated at universities where service-learning does not enjoy strong institutional support or rewards for faculty. A possible limitation is that our institutions, unlike campuses with different institutional cultures, may attract students who expect that service-learning constitutes an integral part of the curriculum (Kasworm, 2010). Furthermore, both institutions actively develop faculty in service-learning, so our faculty may be better prepared to offer high-quality service-learning courses than faculty at other universities.

Materials

Students' employment information and perceptions of service-learning were assessed using a revised version of a survey developed by University A (See Henderson, Fair, Sether, and Dewey, 2008 for information on development of the original survey). The original survey included items on demographics, general student information (e.g., work hours, religious and political views, and past service-learning), and items on perceptions of what students learned from their service-learning. Most of the survey items utilized Likert-type response scales (agree/disagree and frequency ratings). The survey also included space at the end for students to add qualitative comments about their courses.

Procedure

After receiving approval from the Institutional Review Boards at both universities, faculty teaching service-learning courses were invited to be involved in the study. Both universities regularly inform students in advance of registration if service-learning is a required component of the course. At University A, students in most majors can select a comparable course that does not include service-learning, but the small size of University B precludes this choice. The authors did not include their own students in the study. Ten instructors gave permission to survey their classes. Because the faculty self-selected their participation in the study, it is possible that they represent highly confident and proficient service-learning instructors. A researcher administered the questionnaire at a class meeting during the final weeks of the semester. The timing of the survey eliminated students who may have withdrawn from the course. The researcher provided a brief description of the purpose of the study and reminded the students that the information would be confidential and that their participation was voluntary. Next, the students were invited to read and sign informed consent forms. The survey took approximately 10 minutes to complete. The students did not receive compensation for participating, and the researcher thanked the students upon completion of the survey.

Results

General Perceptions of Service-Learning (H1)

To examine students' general perceptions of their service-learning courses, we first examined students' ratings of how challenged they were by the course material and their ratings of how much effort they exerted during the course compared to their other courses (1 = "*much less than other classes*" and 9 = "*much more than other classes*"). The students in our sample rated their courses involving service-learning as being moderately challenging ($M = 5.97$, $SD = 1.83$) compared to other courses and indicated that they exerted more effort in their service learning course ($M = 7.15$, $SD = 1.76$) than in other courses. As would be expected, students' challenge and effort ratings were significantly correlated [$r(165) = .46$, $p < .001$]. That is, students who reported they were more challenged by the material in the service-learning course compared to their other courses tended to report that they put forth more effort.

Interestingly, the correlation between average number of hours worked per week and the challenge rating, and the correlation between number of hours worked per week and the effort rating described earlier, were not significant (p 's $> .05$). Therefore, students' ratings of the courses as challenging or requiring more effort were not related to the number of hours they worked outside of school. These results support the hypothesis that the number of hours worked per week will not be related to perceptions of service-learning (H1).

Table 1
Mean Hours Worked Per Week and Students' Perceptions of Service-Learning

Item	Agreed		Disagreed	
	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>
Enhanced my expertise in my chosen field of study	150	19.72 (12.15)	12	19.13 (9.00)
Helped me understand specific public issues	136	19.29 (12.45)	18	23.97 (8.50)
Enhanced my ability to communicate in a "real world" setting	150	19.64 (12.32)	10	22.00 (10.76)
Helped me develop my problem solving skills	142	19.83 (12.44)	20	20.00 (10.29)
Made me more marketable in my chosen profession after I graduate	148	19.99 (12.54)	13	16.23 (7.58)
Prepared me for work in a culturally diverse world	143	19.14 (12.25)	17	22.85 (9.65)
The community participation aspect of this course helped me to see how the subject matter I learned could be used in everyday life	144	19.70 (12.45)	17	21.18 (9.15)
The community work I did helped me to better understand the lectures in this course	119	19.26 (12.40)	35	22.37 (9.54)
The community work was an important opportunity to expand my professional skills	142	19.56 (12.39)	16	21.41 (10.75)
The community work was not related to the materials in the course	29	20.98 (10.70)	132	19.68 (12.32)
The objectives of this course related to the community work	137	19.24 (12.19)	18	21.72 (9.64)

To further test H1, we examined students' ratings of 11 items (see Table 1) that assessed perceptions of the value of their service-learning experiences in the course (e.g., enhances my expertise in my chosen field of study; helped me develop my problem solving skills). Students answered each item using the following options: strongly agree, agree, disagree, or strongly disagree. We then combined their answers into two categories: agree (*i.e.*, "agree" and "strongly agree") and disagree (*i.e.*, "disagree" and "strongly disagree"). We chose this coding because we did not want to treat the Likert scale as an interval scale given that the distances between the response options are not actually known. Typically, we would retain all response categories. Due to the low number of negative responses given for these 11 items, grouping the ratings into agree and disagree shows the overall findings more clearly and concisely. Independent samples *t*-tests were conducted to test whether or not the means for average hours working per week differed between those students who agreed and those who disagreed with the 11 items. All *t*-tests were non-significant (p 's > .05). Table 1 shows the mean hours worked for those students who agreed and those who disagreed with each item. The data in Table 1 illustrate two main findings. First, the overwhelming majority of the students reported positive perceptions of service-learning. Second, the data provide support for the notion that the number of hours worked per week does not seem to be related to students' perceptions of service-learning. If working were an obstacle to service-learning, then we would expect that those who perceived the service-learning negatively would report working more hours per week than those who reported positive perceptions of service-learning. In the present study, those students who had positive perceptions and those who had negative perceptions worked a similar average number of hours per week.

Another item on the survey allowed us to further examine the relationship between work and perceptions of service-learning, namely scheduling challenges. Perhaps students' perceptions of service-learning are not related specifically to the number of hours worked, but to general difficulty in scheduling around all of their obligations. Students in the present study rated the difficulty of accommodating the community work into their schedules. Approximately 42% of students agreed with the item "the community work was difficult to accommodate into my schedule", and approximately 52% disagreed with the item. An independent samples *t*-test showed that there was not a significant difference in the mean number of hours worked each week between those who agreed ($M = 21.20$; $SD = 12.95$) and those who disagreed ($M = 18.36$, $SD = 11.30$) with that item, $t(156) = 1.47$, $p > .05$. Our finding that about half of the students did not find it difficult to fit the service-learning into their schedules provides indirect support for our hypothesis that hours worked would not be related to students' perceptions of service-learning. However, almost half of the students did agree that scheduling challenges exist.

Students' Work (H2 & H3)

When asked the average number of hours worked at a job per week, students reported a mean of 19.74 hours ($SD = 12.08$). We assumed that average number of hours worked per week at the time of the survey was consistent with average hours worked per week throughout the semester. Figure 1 represents the intensity of students' work per week. Approximately 74% of the sample reported working 11+ hours per week, with almost 40% of the sample working an average of over 20 hours per week.

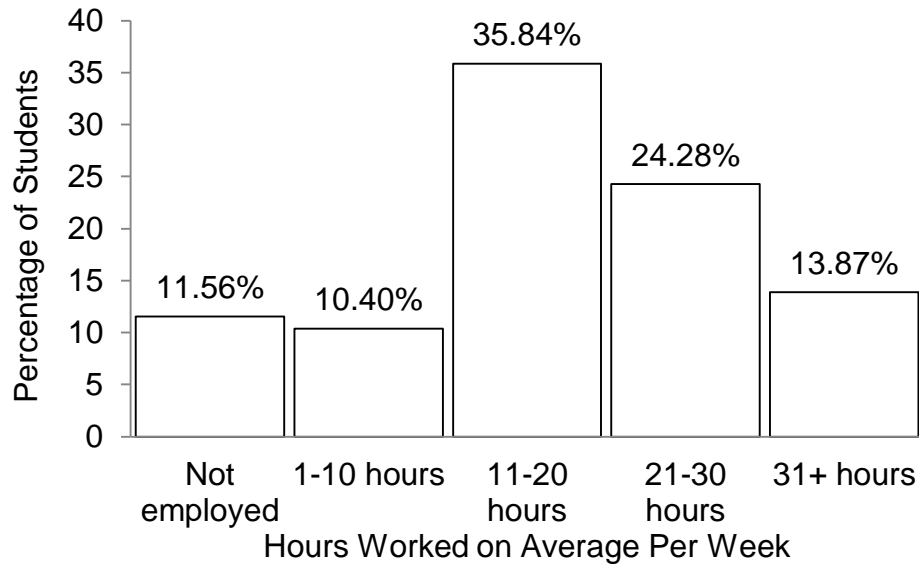


Figure 1. Intensity of students' work.
Note: 4.05% did not provide a response.

Age was not correlated with the average number of hours working per week [$r(165) = .12, p > .05$] and there was not a significant difference between the mean hours working per week for females ($M = 20.93, SD = 1.07$) and for males ($M = 19.42, SD = 12.37$), [$t(162) = .61, p > .05$].

We defined "historically underrepresented" students as all non-white students, as well as first-generation white students. We defined "historically represented" students as white, non-first-generation students. Based on these definitions, 27.17% of the students ($n = 47$) in our sample were historically underrepresented; 70.52% of the students ($n = 122$) were historically represented. Table 2 shows the employment data broken down by subgroups in our sample. As can be seen in Table 2, the percent of students who reported being employed appears similar for each subgroup, with more than 75% of each subgroup reporting employment. H2, that more historically underrepresented students would work than other students, was not supported.

Table 2

Employment Data by Subgroup

Subgroup	<i>N</i>	Subgroup who work % of students	Hours worked per week <i>M (SD)</i>
Historically represented	122	86.89%	20.54 (1.13)
Historically underrepresented	47	76.60%	17.90 (14.50)
White students	141	88.89%	19.90 (11.32)
Students of color	28	81.48%	19.33 (16.07)
First-generation students	29	85.71%	20.20 (13.13)
Non-first generation students	142	88.24%	19.61 (11.95)

To test the hypothesis that historically underrepresented students will report working more hours per week than historically represented students (H3), an independent samples *t*-test was run. The *t*-test revealed that although the mean hours employed per week was higher for the historically represented group than for the historically underrepresented group, the difference was not significant, $t(64.94) = 1.10, p > .05$. Therefore, H3 was not supported.

We also ran a 2 (white students vs. students of color) x 2 (first-generation vs. non-first-generation) analysis of variance (ANOVA) with number of hours worked per week as the dependent variable, to see if there were significant main effects of race/ethnicity and/or first-generation student status. There were no significant main effects of race/ethnicity or first-generation student status (p 's $> .05$). That is, there was not a significant difference in the mean number of hours worked between white students and students of color, and there was not a significant difference in the mean number of hours worked between first-generation students and non-first-generation students. Interestingly though, there was a significant cross-over interaction of race/ethnicity and first-generation student status, $F(1, 156) = 11.24, p = .001$ (see Figure 2). Analyses of simple main effects revealed that for white students, there was not a significant difference in the number of hours worked by non-first-generation students and first-generation students [$F(1, 156) = 2.50, p > .05$]. However, for students of color, first-generation students worked significantly more hours per week than did non-first-generation students [$F(1, 156) = 8.81, p < .004$].

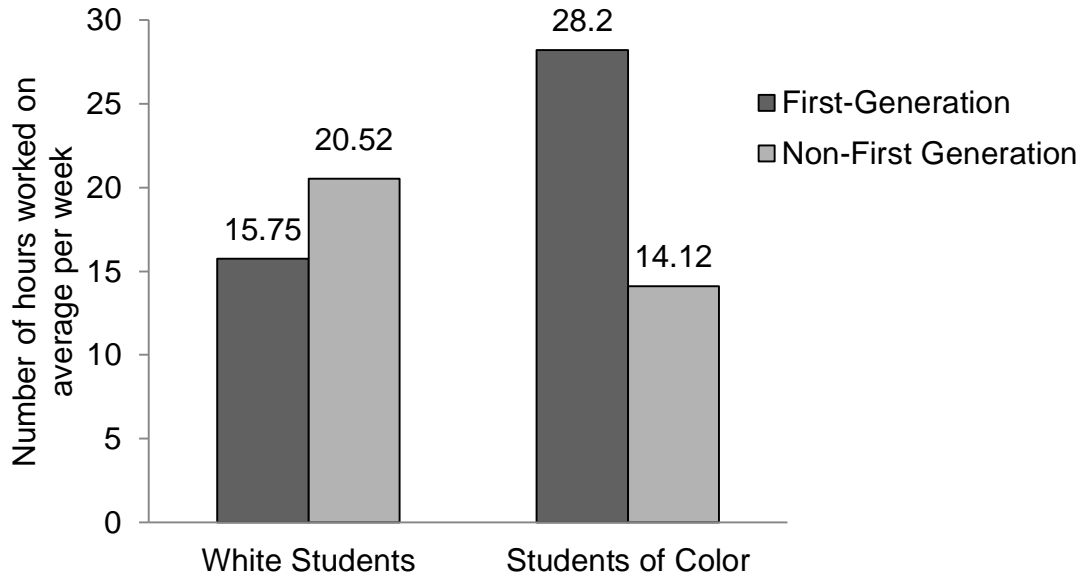


Figure 2. Mean number of hours worked per week as a function of race/ethnicity and first-generation student status.

Underrepresented Students' Perceptions (H4)

We hypothesized that historically underrepresented students would value service-learning more than other students (H4). As can be seen in Table 3, historically underrepresented students reported more positive perceptions of service-learning than the represented students on 7 of the 11 items.

Table 3
Historically Underrepresented and Represented Students' Agreement with Statements Indicating the Value of Service-Learning

Item	Underrepresented students	Represented students
	% agreed (n)	% agreed(n)
Enhanced my expertise in my chosen field of study	89.36 (42)	90.98 (111)
Helped me understand specific public issues	85.11 (40)	79.51 (97)
Enhanced my ability to communicate in a "real world" setting	89.36 (42)	90.98 (111)
Helped me develop my problem solving skills	7.23 (41)	84.26 (103)
Made me more marketable in my chosen profession after I graduate	91.49 (43)	87.71 (107)
Prepared me for work in a culturally diverse world	91.49 (43)	84.26 (103)
The community participation aspect of this course helped me to see how the subject matter I learned could be used in everyday life	95.74 (45)	82.79 (101)
The community work I did helped me to better understand the lectures in this course	76.60 (36)	69.67 (85)
The community work was an important opportunity to expand my professional skills	85.11 (40)	85.25 (104)
The community work was not related to the materials in the course	21.28 (10)	14.75 (18)
The objectives of this course related to the community work	89.36 (42)	80.33 (98)

To test statistically whether agreement/disagreement with each of these 11 items is, in fact, dependent on underrepresented/represented status, Fisher Exact Tests were performed for all 11 items. (Fisher Exact Tests were used rather than Pearson's chi-square because many of the cells had expected counts of less than 5.) All tests were non-significant (p 's $>.05$), which indicates that perceptions of service-learning and being historically underrepresented/represented are independent of one another. These findings do not support our hypothesis that historically underrepresented students would value service-learning more than other students (H4). As can be seen in Table 3, the vast majority of both groups of students held very positive perceptions of service-learning, and the groups were similar in their agreement with the items.

Three items on the survey asked students to reflect on the value of service-learning. Of the entire sample, 87.86% of students agreed (strongly agree + agree) with the statement that the course helped them to take responsibility for their own learning; 54.91% agreed with the statement that students should be required to provide a certain number of community service hours in order to graduate; and 93.64% agreed with the statement that they could "make a difference in my community." Those students who agreed with the last statement may have felt that way prior to taking the course. However, it is noteworthy that such a high percentage of students believe that they can make a difference.

Nine students provided qualitative comments (some positive and some negative) at the end of the survey. Because of the small number of comments, we did not conduct a content analysis. The comments are listed in the Appendix.

Discussion

The purpose of the present study was to examine if students' employment is related to their perceptions of service-learning, including analysis of historically underrepresented students' perceptions. Students in our sample worked, on average, about 20 hours per week. Our hypothesis that number of hours worked would not be related to students' perceptions of service-learning (H1) was supported. Although the students in our sample were very busy, at the end of the courses most students, regardless of the number of hours worked, reported that their time spent in service-learning was valuable to their education. Failing to find a significant relationship between students' work and perceptions of service-learning provides support for the notion that instructors should feel comfortable using high-impact practices, such as service-learning, that require students to invest more time outside of class meetings than do some other teaching-learning strategies. However, we cannot ignore Karasik's (2005) finding that when students have an option within a course, some select a traditional research paper over service-learning because they perceive that employment and other responsibilities conflict with the service-learning project. Although students' actual work hours may not be related to how they perceive service-learning at the end of the course, students' judgments that they do not have time for service-learning may lead them to avoid enrolling in service-learning courses. This would be a missed opportunity for high-impact learning. Because service-learning was required in courses we surveyed, we do not know if our students would have chosen an alternative to service-learning if given the opportunity. Our data on student employment confirmed the finding that students perceive service-learning positively, regardless of how much they work. Nevertheless, we found that number of hours worked was not related to students' perceptions of the effort they put forth compared to other classes, which contradicts research that students who worked more hours reported devoting more effort to their courses than did students who worked

fewer hours. One possible reason for the conflicting findings is that previous research compared students who worked over 30 hours with those who worked under 30 hours. To obtain a more detailed picture of students' work experiences, the researchers in the present study asked students to report the average number of hours they worked per week and used that continuous variable in the analyses rather than treating hours worked as a categorical variable (i.e., over or under 30 hours). It should be noted that in our study students' perceptions of service-learning were overwhelmingly positive. The relationship between student employment and perceptions might be different if we had a dataset with more variability in the perceptions students held (i.e., more negative perceptions).

Our hypotheses that more historically underrepresented students would be employed than other students (H2), would report working more hours per week than other students (H3), and would view service-learning more positively than other students (H4) were not supported. Overall, historically underrepresented students did not work more hours per week than other students. Their perceptions of service-learning, while very positive, were similar to the perceptions of other students. However, the analyses showed a more complex pattern with respect to the relationship between hours worked and historically underrepresented student status. We found that for students of color, first-generation students worked significantly more hours per week than non-first-generation students did, which was not expected and was not found for white students. We attribute findings for students of color to two factors. The first is methodological: We did not study some factors that may influence the findings, such as why students work (for meaning or because of financial need), wages for each hour of work, expected family contribution to college, and students' debt loads, grants, or scholarships that may impact their financial situations. Perhaps income and employment dynamics regarding financing students' educations operate differently for white families and families of color. The second, related reason is the financial need to work. Many studies document that people of color generally generate lower incomes and accumulate significantly less wealth than whites (e.g., Oliver & Shapiro, 1995). Research shows that first-generation students of color may have more financial need to work (and may earn lower wages per hour, thus increasing the number of hours they need to work) than non-first-generation students of color (e.g., Flowers, 2010). Social networks of family and friends contribute significantly to people's abilities to secure well-paid employment. Through networks of family and friends, students of color who are non-first-generation may have access to better networks to higher-wage jobs than first-generation students of color (Wilson, 2006). The present study did not collect wage data. More research is needed on students' access to educationally meaningful and well-paid employment in order to explain the findings.

Limitations and Future Directions

The present study is not without limitations. Our study included data from two universities in the same city. Future research should include a diverse sample of universities and colleges to test further whether or not work and other obligations are related to students' perceptions of service-learning and to their actual learning through service-learning courses. Our courses were primarily pre-professional in discipline, so results cannot be generalized to all disciplines. It is possible that a sample of students in liberal arts and sciences courses would perceive service-learning differently in relation to their employment. Future research could investigate if our results hold across a variety of disciplines. We did not investigate students'

reports of strategies they use to manage the multiple demands on their time, information which could be helpful for planning future service-learning courses.

Few students in our study reported negative perceptions of service-learning. Future studies could include a larger sample of students, which would yield more negative perceptions. Investigating the small percentage of negative perceptions could provide insights into improving all students' service-learning experiences.

Little research exists on working students who commute to college (Ziskin, Torres, Hossler, & Gross, 2010). Though the majority of our sample likely lives off-campus (given overall demographics of the two universities), it should be noted that we did not identify whether students lived on- or off-campus or whether they worked on- or off-campus. Ender, Martin, Kowalewski, Cotter, and Defiore (2000) found that off-campus students who worked were less likely than any other group to choose service-learning courses. Residential students who do not work, or those students who work part-time on campus, might be more likely to select service-learning when it is optional (Ender et al., 2000). Future studies could also investigate if there are differences in students' perceptions of service-learning depending upon if students work on-campus, off-campus, or both; intersections could possibly exist between the factors above and if students live on-campus or off-campus. For example, does a student who lives off-campus and works off-campus view service-learning differently than a student who lives off-campus but works on-campus?

Another limitation of the present study was that we collected data at the end of 16-week (one semester) courses; it is possible that students' perceptions (either positive or negative) would be different if measured at the beginning or middle of the service-learning project, as well as after a period of some weeks after the courses end. Future studies should investigate changes in perceptions across time.

In *Understanding the Working College Student*, Perna (2010) suggests future directions for research on the impact of employment on various aspects of students' college outcomes and experiences. Many of these suggestions apply to the impact of employment on service-learning experiences and outcomes in particular. For example, future research could compare our results with results of a similar survey at universities located in geographic areas with higher and lower unemployment rates than the metropolitan area where the two universities are located, which features a relatively low unemployment rate. Students did not report on the survey their pre-collegiate work experiences, if they were financially dependent or independent at the time of the survey, the kinds of work in which they are engaged, and the reasons that they work. We cannot hypothesize regarding how these factors might influence students' views of service-learning, but future studies could explore these issues.

Conclusions

Our study shows that students value service-learning as a teaching-learning strategy with high impact on their education. Despite findings of intense student employment, service-learning is a demonstrated and effective educational practice for students regardless of employment status, hours worked, and historical representation. The study suggests that, even for working students, service-learning can be one high-impact practice that prepares students for success in the civic, professional and personal dimensions of life.

Notes

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Appendix

Qualitative Comments

- College students have enough things to worry about than adding this into it also. If you still want to force this, at least let students choose their own place to volunteer, that will actually benefit them.
- Ability to choose our own location to benefit my major.
- I understand why it is important to be involved in the community, but there were times when I felt in the way. The place wasn't prepared or organized for us.
- I think that classes that involve working in the community should be worth more than three credit hours.
- This class was very different than any other class I have taken. I really enjoyed it. It was a challenge at times to find the time but what part of life is not a little bit of a struggle!
- The hours were excessive and I don't think she knew how many hours would be involved. Not helpful, but interesting.
- I enjoyed our service learning project but do not think course content was taught to reinforce and help with the service learning project.
- I think some community learning is good if it is blended into class time. Outside of class time is very hard to accomplish.
- This has been my favorite service project so far. Class discussions really helped me enhance my experience and the teacher helped me fit hours into my schedule.

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