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The Effects of Service-Learning on College Students' Attitudes Toward Older Adults

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Abstract

The current U.S. healthcare workforce shortage is at crisis levels for providers who specialize in elder care (Harahan, 2011; Kovner, Mezey, & Harrington, 2002). Barriers such as ageism, lack of awareness of the need for workers, and lack of contact with seniors can impact the career choice of young professionals (Gross & Eshbaugh, 2011; Hutchison, Fox, Laas, Matharu, & Urzi, 2010; Lun, 2012). To explore ways to increase the number of students who pursue gerontology and to expand the elder care workforce, the researchers conducted a qualitative content analysis on the impact of service-learning in senior care facilities on students' attitudes toward older adults. Students with senior contact reported increases in positive perceptions of seniors, discovered their own ageist stereotypes, and developed an interest in a career in elder care. Twenty-one months after the service-learning experience, students were surveyed again with their responses indicating continued positive attitude changes along with professional development demonstrating beneficial long-term effects from the experience.

Introduction

The current shortage of healthcare workers prepared to care for the U.S. aging population is at a crisis level. Projections indicate this deficiency will increase in the coming years, creating dire consequences for healthcare service delivery (Institute of Medicine, 2008). According to the latest data reported by the U.S. Department of Health and Human Services Administration on Aging, about 40 million people in the U.S. were age 65 or older in 2009, and there will be at least 72 million older adults by 2030. Additionally, the aging generation of "Baby Boomers" (people born between 1946 and 1964) is living longer due to more active lifestyles and medical advances. With older adults being the focus of the majority of healthcare services (Center for Health Workforce Studies, 2006), a distressing shadow is cast on the future of elder care. The number of people currently working in healthcare is insufficient to accommodate the current population, much less the aging demographic profile of the country (Stone & Harahan, 2010).

One approach to addressing this shortage is to encourage college students to choose careers in elder care, a challenging goal given the multiple barriers in place. Social phenomena such as ageism, lack of awareness of the need for workers, and a general lack of interest in and

contact with older adults have been identified as fostering misperceptions that affect career choice and steer students away from working with seniors (Gross & Eshbaugh, 2011; Hutchison, Fox, Laas, Matharu, & Urzi, 2010; Lun, 2012; Stone & Harahan, 2010; Wesley, 2005). Given these dynamics, the challenge for the current authors was clear: “How do we motivate students to enter the elder care workforce?”

Background

The basis for the theoretical framework for service-learning can be found in the works of the educational philosopher John Dewey and the experiential education research developed by David Kolb, both of whom emphasized active learning through experience, inquiry, and reflection (Cone & Harris, 1996; Dewey, 1916; Giles & Eyler, 1994). Dewey argued that in order for knowledge recall to take place, it should be attached to an experience or a contextual situation; otherwise, this knowledge may be forgotten (Giles & Eyler, 1994). Additionally, Dewey asserted that education is not simply a matter of the student regurgitating information from the teacher, but rather involves the student’s participation in her or his own learning (Dewey, 1916). Kolb’s (1984) four-stage model of experiential learning, which includes reflective observation, abstract conceptualization, active experimentation, and concrete experiences, was influenced by Dewey’s model of inquiry (Cone & Harris, 1996). The current authors used the approaches developed by Dewey and Kolb as the basis for their methodology.

Multiple studies suggest that possessing a positive attitude toward older adults can have an effect on whether one makes the career choice to work with them (Gonzales, Morrow-Howell, & Gilbert, 2010; King, Roberts & Bowers, 2013) while additional studies have indicated that quality contact with older adults is associated with developing a positive attitude toward them (Lowe & Medina, 2010). Allport (1954) says in his contact hypothesis that positive interpersonal contact can diminish the effects of prejudice over time. For communication to take place without anxiety or fear of conflict it must occur under optimal conditions—including equal status among groups, intergroup cooperation, common goals, and authority support (Pettigrew, Christ, Wagner, & Stellmacher, 2007). When personal prejudices, biases, misperceptions, and assumptions can be explored between groups, arbitrary meanings are replaced with more accurate perceptions. The effectiveness of the contact hypothesis in reducing prejudice has been supported in many different groups and settings (Pettigrew & Tropp, 2006).

Institutions of higher education can provide their students with opportunities for exposure to and cooperative contact with older adults through service-learning assignments. Service-learning is “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development” (Jacoby, 1996, p. 5). In order for service-learning to be effective, it must first meet a community need as identified by a partnered community-based organization; it must be linked to an academic course, thereby enhancing the course curriculum; and participants should have the opportunity to reflect on their experiences both verbally and in writing (Duke, Cohen, & Novack, 2009; Lowe & Medina, 2010).

A number of studies have shown a positive change in attitudes when students participate in “intergenerational service-learning”—an approach that brings together younger and older age groups for meaningful interaction (Dorfman et al., 2004). Lowe and Medina (2010) showed that students who participated in a service-learning experience had improvements in their attitudes toward seniors, death, and dying. Duke et al. (2009) concluded that the students in their intergenerational service-learning study not only reported having a better attitude toward seniors in general, but also felt that their experience with senior partners helped them to become more effective communicators with seniors.

The exposure effects of service-learning provide an opportunity to change attitudes, perceptions, and behaviors while simultaneously gaining new knowledge and understanding of the aging population. Providing practical “real world” experiences outside the classroom that are closely aligned with the course curricula can influence the pursuit of a career in elder care (Robert & Mosher-Ashley, 2000).

The literature suggests that integrating guided reflective practices into educational programs (through intellectual discourse, journaling, and other methods) enhances course curricula and stimulates self-examination (Jonas-Dwyer, Abbott, & Boyd, 2013; Smith & Trede, 2013). Jakubowski (2003) found that reflection can encourage critical thinking when employed to review social experiences and one’s own reactions to those experiences. Further, Kolb (1984) posited that reflection is an essential practice for learners to explore deeper meanings, and new meanings, as they engage in experiential education.

Research Questions

To gain a deeper understanding of the influence of intergenerational service-learning and reflective practice, the current investigators conducted a qualitative analysis of student experiences by exploring the following questions: (a) In what ways do students working with older adults in a service-learning setting experience a change in attitude toward seniors? (b) How will the service-learning projects impact a student’s career interests and choices?

Methods

Ethical Procedures

Institutional Review Board (IRB) at the author’s university approved the study’s Human Subjects Protocol. The project was approved as exempt from obtaining informed consent as an educational activity.

Participants

Participants were healthcare administration undergraduate students at a large public Southern California university enrolled in a required upper-division course. The age range for the 36 students enrolled in the course was 21–30. Of these students, 24 were randomly assigned to a senior facility while 12 were assigned to a non-senior facility (for the purposes of this study, only the data collected from students at the senior facilities was analyzed). Of the 24 students at the senior facilities, 50% were juniors, 50% were seniors and 71% was female. The class was racially and ethnically diverse in that 17% were African American/

Black, 25% were Asian/Pacific Islander, 25% were Middle Eastern, 25% were Latino and 8% were Caucasian/White.

The Course

All students were required to participate in a service-learning project as part of completing course credit. The course provides instruction on the types of management skills used within a variety of healthcare settings. Skills that were discussed included but were not limited to cultural competence, emotional intelligence, empathy, team development, conflict management, and communication. The service-learning component offers students the opportunity to practice these skills in a real-life setting. Topics such as generational diversity and elder care issues are fully explored using a combination of case studies and prepared course lectures.

On a weekly basis students gave oral reports on their experiences at their service-learning site. Self-awareness and self-evaluation of participants' traits, character, attitudes, behaviors and personal philosophies were a routine part of course discussions. At the beginning of the semester, students were asked whether they had regular contact with older adults. More than 90% of the students said they had little to no experience interacting with seniors on a regular basis before they started their service-learning project. When the project began, students at the senior sites made comments about how uncomfortable they were around the seniors or made ageist remarks. As an example, a student joked that she thought that her senior partner had Alzheimer's because he kept repeating himself. After some of the students laughed, the researcher asked the class, "Why was that funny?" Honest and thought-provoking discussions such as this were facilitated to encourage students to face their biases and assumptions about seniors and talk about them. Oral reports were used as a means to encourage peer-to-peer mentoring. For instance, if a student brought up an issue he or she was unable to solve, other students would provide recommendations and support. When it came time to report the following week, students would often ask follow-up questions to find out how things had worked out with a particular issue. As this was a management skills course, students related their service-learning experience to what a manager, supervisor, or administrator might practice in the workplace. Application of interpersonal skills was explored through small group discussion. For example, in small groups, students discussed what empathy is, what it looks like, what it feels like, and whether they personally experienced empathy at their service-learning site.

Study Design

Three unique facilities were chosen as sites for the service-learning project: (1) the University's student Health Center, (2) a not-for-profit adult day care center, designated as a "senior enrichment center" (Senior Center), and (3) a for-profit senior residential facility (Senior Residence). The senior population for the two senior facility placements was defined as adults over the age of 60. This paper focuses on the experiences at the Senior Center and the Senior Residence.

Description of Service-Learning Projects

Students were instructed to complete a minimum of 20 hours of service-learning over the course of 10 weeks. Each site provided 1 hour of orientation, which was included in the students' required service-learning hours. The Senior Center program director and the Senior Residence sales and marketing representative served as service-learning preceptors at their respective sites. Service-learning hours were tracked on a timesheet and preceptors signed each timesheet at the end of students' shifts. Preceptors assigned a main project to each student group to work on collaboratively during their placement. Preceptors were also required to provide progress reports to the researcher on student engagement, successes and challenges.

Senior Center—The Senior Center students were required to spend a minimum of 8 hours interacting with the older adults under conditions consistent with those outlined by Allport (1954), including equal status among groups, intergroup cooperation, common goals, and authority support. Examples of meaningful interactions included taking an exercise class with them, participating in facilitated discussion forums, or playing games with them such as table tennis or pool.

Additionally, students were charged with producing an informational video that would be used by the Senior Center when applying for grant funding. The preceptor's reasoning for requiring interaction was that she wanted the students to get used to being around seniors and begin relationship building. She also wanted the seniors to get used to having the students there so that when the time came to start interviewing and filming, the seniors would be more willing to participate. The video was to include interviews, testimonials, interactive activities, and highlights of the programs offered by the center.

The culminating event was a lunchtime screening of the video to the seniors and staff. At the end of the project students at this site completed an average of 27 service-learning hours.

Senior Residence—The Senior Residence preceptor requested that the students produce video documentaries of oral histories for a select group of seniors. Ten seniors signed up, leaving four students to share two seniors. Matching of students and seniors was arranged by the preceptor.

Students met with their senior in a common area or in the senior's apartment. Students were instructed by the preceptor to spend quality time with their seniors first before delving into the interview, and they were told to keep their seniors informed of every step of the interview and filming process. Students were briefed about their senior's health conditions and instructed in senior safety.

Upon completion of the project, an evening movie-screening event was held at the Senior Residence to premiere the videos to the residents and staff of the community. At the end of the project, students completed an average of 23 service-learning hours.

Reflective Practice and Assessment Method: Weblogs

Dewey (1916) asserts that students must be actively involved in their own learning, and it should include purposeful thinking or reflection. To that end, participants were assigned to keep a reflective weblog to document their attitudes and perceptions before, during, and after their service-learning experiences. Participants were instructed to describe in their blogs which activities they participated in, what they felt, what they saw, whom they met, and whether they learned anything new. Participants were told that their weblogs were their safe zone; they would not be penalized for blogging negative insights or using poor grammar. They were told to be honest and authentic. Access to the students' weblogs was given only to the researchers. For the researchers, weblogs were used as a data collection method. Please note that for the purposes of this manuscript, minor editing has been done to correct grammar.

Qualitative Analysis

The two investigators independently analyzed a total of 265 weblog entries. The blog entries were entered into qualitative analysis software programs to assist with thematic tracking.

The first investigator (I1) used the program "Xsight," published by QSR International. Conducting a line-by-line analysis, I1 used the following procedure: Step 1. Read each blog entry, highlighting phrases of meaning in the blog. Examples of emergent themes of meaning are learning, career choice, and emotional and cognitive expressions. Each passage was coded with a theme. Step 2. The investigator then reread the passages to assign subthemes or "categories" as they are referred to in the remainder of this report. I1's review resulted in five themes: attitudes, feelings, observations, lessons learned, and challenges.

The second investigator (I2) performed a conventional content analysis (Hsieh & Shannon, 2005) of each blog entry using a qualitative data analysis software program called "NVivo," also published by QSR International. To conduct her data analysis, I2 conducted two readings. The first cycle was a reading of each blog entry. On the second reading I2 did a passage analysis and pulled terms and phrases that she identified as coding patterns; categories were then developed. I2 reread each category and combined related categories (e.g. career development/personal development). This final step resulted in five themes: emotional reactions, attitudes/behavior, learning, service-learning encounters, and observations.

After independent coding, the two investigators reviewed each other's themes and categories. Four rounds of discussions were held between the two researchers resulting in seven themes displayed in the results section below.

Follow-up Survey

Dewey posited that knowledge recall is attached to a reflective experience or contextual situation (Giles & Eyler, 1994). To explore whether and how participants' service-learning experience continued to have an impression on their professional development and career choices, a follow-up survey was emailed to all initial participants 21 months after the completion of their service-learning projects. The survey asked the following open-ended

question: “Please describe if there was anything about this service-learning experience that affected your current career development, your personal development and/or your professional development.” Fourteen individuals responded to the follow-up survey (N=6 Health Center, Senior Center N=5, Senior Residence N=3). Only the analysis for the 8 responses received for the senior facilities are included in this paper. No email addresses came back as invalid, but it is unknown how many participants viewed and opened the email. The follow-up survey was subject to a thematic analysis similar to the analysis used for the weblogs.

Results

Weblog Analysis

The investigators’ consolidation of their independent efforts centered on student attitude and career choice. Their final analysis resulted in seven themes: (1) positive interactions with seniors, (2) positive feelings—general, (3) attitudes/behaviors toward seniors, (4) reflective learning about self and seniors, (5) negative feelings—general, (6) professional development, and (7) observations about character arc demonstrating a change in attitude toward seniors. Table 1 displays the classifications and includes frequency counts for each theme per site, total theme count and examples of student commentaries.

Theme 1: Positive Interactions with Seniors—The total coded comments in this category were 153, the highest number of coded comments received across the themes. There were 60 comments at the Senior Center and 93 at the Senior Residence that were identified as positive interactions with seniors. One student placed at the Senior Center wrote, “In the golden age class, they wanted to know more about me so I shared about the culture from my country. I had a wonderful time in both classes.” A student at the Senior Residence commented, “My resident is full of stories to tell. He even showed me a picture of his father fishing with Ernest Hemingway. Very cool!” These responses are representative of many students who, based on analysis of their blogs, seemed pleasantly surprised that their senior experiences were positive..

Theme 2: Positive Feelings—Indications of positive feelings tallied the second-highest number of coded comments (131). High numbers of positive feeling comments came from both the Senior Center and Senior Residence—74 and 57, respectively. One student at the Senior Center commented, “They made me feel so important to them. I love the center and I love the people there ... it is a place that is filled with care, support and love.” A student at the Senior Residence wrote, “I love spending time with [senior] because she is so full of wisdom and [she] gives me the best advice ... I feel so much better every time I leave ...” These positive feelings gave the authors the impression that the student participants liked being around seniors and were in fact gaining a benefit from their interactions.

Theme 3: Attitudes/Behaviors toward Seniors—Attitudes/behaviors toward seniors garnered 110 coded comments, with 66 from the Senior Center, 44 from the Senior Residence. Many students discussed their own biases about the physical health of seniors when they came face-to-face with their own misperceptions. The following are examples of

comments written by students at the Senior Center, “After 30 minutes stretching, I felt my body begin to sweat ... they [seniors] can bend their knees for the entire class, but I could only bend my knees for 10 minutes.” “I was impressed and exhausted with the class. I never had in mind seniors were so active.” “I must say it was hard keeping up with those seniors, found myself getting really tired during the dance class, am still wondering how they manage to keep up.” Finally, this student sums up a common stereotype concerning the frailty of seniors:

I was very impressed with these seniors because I never realized how strong these seniors were ... people think that seniors are usually slow and aren't capable of doing things like ongoing exercise, but I'm sure that if anyone were to join in the class too, they would be pretty shocked as well.

Students also described being surprised by how alert, communicative, warm, wise, and experienced seniors were. It is clear to the authors that the students' service-learning experiences dispelled myths that they once considered “truths.”

Theme 4: Reflective Learning about Self and Seniors—A total of 77 coded comments (38 for the Senior Center and 39 for the Senior Residence) focused on reflective learning about self and seniors. One student at the Senior Center wrote:

I have always asked myself the same question at different times in my life. Where are we going to end once we become seniors? Almost every time I asked myself that question I get a different answer or similar to a previous response. This time my answer was maybe one day I'll be coming to [Senior Center] to spend my time here.

Another comment from the Senior Center:

I parked my car about 10 feet away from the main entrance so I was able to see a few seniors go inside.... I started to think about what is going to happen to me once I become a senior.

Interacting with seniors affected these students in such a way that they started to reflect on their own mortality and to develop empathy toward seniors. These are outcomes of Allport's (1954) contact theory. As students are placed in the reality of a senior's world, they realize this could be their life someday. Facing this reality sparks introspection and consideration about what it means to be an older adult.

Theme 5: Negative Feelings—Negative feeling comments were lower at the Senior Residence (5), with 18 identified at the Senior Center. While only conjecture, this could be due to the luxurious nature of the Senior Residence facility. Most students placed at this site commented on how nice the accommodations, service, and amenities were at the location. As for negative feelings, some students did not want to participate in service-learning, conveying that they needed their time to work and do other things. Some students wrote about how nervous, scared, or anxious they were about interacting with seniors for the first time. One student at the Senior Center wrote: “Before walking in I felt a bit nervous to just walk in and start a conversation with them.” A student at the Senior Residence wrote: “I

thought to myself, ‘What am I going to talk about with this old man for as long as I possibly can?’ I realized I was giving myself doubts about how this meeting was going to be.”

While some students expressed negative feelings at the prospect of interacting with seniors—for example, “I was nervous because usually, I feel like I’m not good at being around elderly people. So this was like the ultimate test for me”—in most cases their feelings became positive after the students met the seniors and got to know them. One student wrote: “Us meeting each other ended up not being so bad after all. My partner was really sweet and nice and very alert for her age. We were able to talk to each other easily.” Students whose comments initially reflected anxiety typically revealed that as soon as they met their senior for the first time, anxious feelings were replaced with positive and hopeful feelings.

Theme 6: Professional Development—A total of 14 comments (11 at the Senior Center and 3 at the Senior Residence) discussed how the service-learning experience provided focus on future careers while at the same time encouraging students to contemplate what they were doing to prepare for the future. Students mentioned that they gained new knowledge of careers involving working with seniors. One student at the Senior Center wrote:

This semester it was brought to my attention from one of my professors to get a minor in gerontology. I’ve been thinking about it but now with the experience gained from this opportunity, I will declare the minor. It will open more doors for me and having the experience to work with seniors is beyond words.

A student at the Senior Residence wrote that she was asked by the preceptor whether she considered skilled nursing as a career option. The student added: “An insightful question that had led me to thinking about my future.” Another student at the Senior Center wrote about how he was asked to create an Excel spreadsheet and while working on the task realized that his Excel skills were weak. Knowing this, the student admits in his blog that he needs additional training to strengthen his understanding of Excel.

Theme 7: Observation about Character Arcs—Observed character arcs (changed attitudes toward seniors) were found in 16 coded comments (8 at the Senior Center and 8 at the Senior Residence), with students commenting on how their attitudes toward seniors changed positively because of their service-learning experience. A student at the Senior Center reflected on the orientation meeting where students were asked, “What is a senior to you.” At the end of the experience, the student wrote: “Now when I think back about that question ... seniors are not ‘old people’ they are people of ages 55 and older. I learned that the word ‘seniors’ has been overlooked by the youth nowadays.” A student at the Senior Residence wrote about a thought-provoking realization he had:

On this particular Wednesday afternoon, as I headed to the [Senior Residence], with my windows down, stereo on full blast, and with the wind blowing in my hair ... I thought to myself, “wow ... I have made myself a friend who is OLD!” It was a dramatic drive over.

Another student wrote that talking to older adults was just like “talking to people that were my age!” Again, these comments are reflective of Allport’s (1954) contact theory. Once the

veil of bias is lifted, the truth is revealed. Students begin to restructure their former ideas of what “old” is and begin to incorporate facts to develop their new knowledge of who seniors are.

Follow-up Survey Results

Fourteen of the initial 36 students responded to the follow-up survey, which asked the open-ended text question: “Please describe if there was anything about this service-learning experience that affected your current career development, your personal development and/or your professional development.” A sample of 14 returned surveys out of 36 email requests represents a response rate of 38.8%. Five of the Senior Center students, three of the Senior Residence students, and six of the Health Center students responded to the follow-up question. Only the responses from the senior facilities are included in the final analysis. Five themes emerged from this data that investigators felt had relevance to student development and career direction: (1) positive reflections, (2) negative reflections, (3) positive attitudes about seniors, (4) professional skill development, and (5) career choice/interest. Overall, service-learning students who were placed with seniors wrote that the experience continued to have an impact on their attitudes toward seniors and on their professional development, and inspired a career interest in elder care. Table 2 displays the frequency counts for these themes as well as examples of student commentaries.

Responses to the study questions that relate to a change in attitude regarding seniors are of particular interest. The investigators identified seven positive commentaries about seniors from the Senior Center, and three from the Senior Residence. To be concise, only one example was placed in the table, but all 10 of these comments indicate a positive impact that a service-learning experience with seniors can have on changing students’ attitudes. One Senior Center student wrote: “The one-on-one interaction helped me change my perspective on seniors and [I] was able to relate and get to know them [on] a personal level.”

Another set of interesting comments came from the one student at the Senior Residence who had a negative experience. After initially indicating she was looking forward to the opportunity with “high hopes,” she noted that she was disappointed when the seniors she was assigned to work with were distant and uncooperative. Additionally, the student, who came from a low-income household, observed that the site was “very prestigious,” and only affordable to the wealthy. This increased her awareness of disparities based on socio-economic status and raised concern in her over the safety and well-being of her own parents as they age. Identifying factors that make the difference between a positive and a negative experience for the student could be beneficial for faculty, students, and the placement organizations.

Discussion

The study investigated a proposed method of expanding the elder care workforce by using service-learning to change the perceptions, attitudes, and mindsets of college students with the aim of motivating career interest in elder care services. When taking a deeper look at the commentaries, meaningful observations can be made with respect to student attitudes about seniors in general, and specifically about working with them in the health field. Additionally,

the text reveals potential constructs and variables for further study. Evaluating the data from this approach, the investigators made the following observations:

1. Students contemplated working with seniors as a health professional, in addition to envisioning their own process of aging.
2. Some career choice comments include an intention to pursue gerontology and to collect more information about careers working with older adults.
3. Comments indicating attitudes and behaviors toward seniors revealed that participants experienced moments of sudden insight and change in perspective about seniors, e.g., seeing seniors as people “just like us.”
4. As discussed in the Results section, Theme 5: Negative Feelings, students tended to experience a sequence of emotions beginning with being nervous and moving to experiencing surprise, followed by accepting new learning, and for some eventually developing a new interest in the health field as a career choice.

The reflective blog commentaries show that students at the senior placements discovered that older adults possess a wealth of information, and gained a realization that seniors are resilient, seniors have been here before them, and seniors have had life experiences that these students may have only read in history books. Some of these comments clearly indicated a positive change of attitude and an appreciation of seniors. It is important to note that although subjects were not specifically asked to reflect on their opinions of seniors, the majority of their self-inspired reflections were focused on seniors.

Best Practices and Lessons Learned

To further debrief the project, investigators identified what worked well (best practices) and opportunities for improvement (lessons learned) to be applied to future senior care workforce development studies.

Best Practices

1. Service-learning projects should be clearly relevant to the health administration course objectives, allowing students to receive on-site training and making real-time connections between course material and their projects.
2. Integrating the service-learning projects into the course discussions not only helped to further the connections between theoretical concepts and real life, but also provided students the support space to share challenges and successes.
3. Holding mandatory orientations at each site was effective in giving students the sense that they were now important members of the placement community. Orientations included a meeting with members of the leadership team, risk management information, and a tour of the host facility.

4. It is imperative that the services provided by service-learning participants are meaningful to the placement and meet an essential need for the organization. This ensures benefit to both the students and the placement by providing intrinsic motivation and rewards for being of service.
5. The weblogs provided a space not only for honest reflective learning, but also for creative expression. Students activated and developed their own blog space. Some students included photographs of their engagement activities. In general comments displayed a comfort with providing honest reactions to what they were doing and how they were feeling. As an example, investigators read early comments on how service-learning was a waste of time and not worth the effort (disengagement), e.g., “Why do we have to do this?” “Doesn’t the professor care that I have other classes and responsibilities? I don’t have time for this!” These disengaged comments stand in contrast to comments made after the experience by the same students, who are now engaged and invested: “It took a lot of time, but in the end I’m glad I did it.” “A lot of work...but a good experience. I would recommend this to other students.”

Lessons Learned

A few challenges and opportunities for improvement arose for the instructor. The most challenging aspect of the project was handling the logistics of two distinct locations throughout the city. With site visits of critical importance, the time spent traveling to placements and scheduling with preceptors was greater than initially anticipated.

A second unanticipated challenge involved the personalities of the preceptors, who were all employed at the director level in their facility. While it is a good strategy to have support and engagement from members at the highest levels of the organization, it should be noted that personnel near the top of the hierarchy are leaders by position and nature, and therefore some high-level preceptors might want to take control of the project and divert the students to work on something that was not initially agreed upon. An example of this issue occurred during the current investigation. Without first consulting the instructor, one of the preceptors made additions to the assignment midway in the semester, causing stress and confusion among the students. Fortunately, the instructor was able to collaboratively work with the preceptor to create a compromise that met the needs of the facility and the students while still maintaining the integrity of the project.

At the end of the study it occurred to the researchers that it would have been invaluable if the recipients of the service-learning (the facilities’ staff and the older adults) were asked to provide feedback about the impact the service-learning had on them. A review of the literature finds that very few studies have surveyed the impact of service-learning on the recipients (Roodin, Brown & Shedlock, 2013).

Solutions to the logistical challenge are simple in nature but not necessarily easily implemented, with an emphasis on good time management being the most obvious remedy.

A second practical solution is to train and employ graduate assistants to support the program with communication and site visits.

To address the possible challenge of a controlling preceptor, we suggest a process solution. Upfront and as clearly as possible, define the scope and expectations of the project and the boundaries of supervision that the preceptor has with the students. Ideally this will occur first through dialogue to achieve consensus and ensure understanding. Additionally, a written agreement memo should be drafted by the faculty in charge and would be reviewed and signed by the preceptor.

When students are paired with seniors, faculty members would be wise to work with on-site preceptors to develop a screening process to ensure that the senior will be cooperative and available barring any unforeseen events such as health issues. A mechanism should also be in place for changes in assignment if the match between student and senior does not feel comfortable to either party in the early stages of the project.

Finally, to facilitate the gathering of feedback on the impact of the service-learning on the recipients, the faculty member should make contact with the preceptor on a regular and mutually agreed upon basis (at least twice a month for a semester-long project). Ignoring the salient reactions of the recipients of service-learning before, during and after the service-learning was a limitation of the present effort and should be addressed in future study.

Service to the Organizations

In addition to the rich learning experience reported by the student participants, each organization received the anticipated services from its student group. The Senior Center now has a professional DVD that it currently uses at health fairs, fundraising events and national conferences. The Senior Residence now has an archived video documentary of oral histories that detail the various lives of a number of its seniors. The successful delivery of these products continues to enhance the relationships between the community service providers and the University.

Conclusion

Although the sample size in this study was not large, several contributions to the field addressing eldercare workforce needs can be identified. The techniques and lessons learned here, once applied more broadly in educational settings, will provide data for further study eventually leading to evidence based practices in workforce planning. Notable on this point were the observed arcs in the minds of the undergraduate students expressed in the weblogs (Theme 7: Observed Character Arcs). These particulars revealed that a student, who is afraid and lacks confidence or desire to work with seniors, once exposed to a positive experience in a care delivery setting may experience a positive shift in attitude, and also spark career interest. This change may motivate the student to take further steps in the direction of senior care as a career choice (Theme 6: Professional Development). Knowing this detail can encourage future instructors to work through student resistance and include more service-learning opportunities in senior care settings in their curriculum. Additionally, the use of reflective practice combined with qualitative analysis can help instructors understand

specific sources of both resistance and reward, helping them to better manage expectations for the students as well as the preceptors on site. Expanding on this, student experiences can be analyzed for driving and restraining factors in developing the elder care workforce, leading to enhancements in curriculum and increases in motivation to explore career paths in related areas.

Another potentially powerful contribution to understanding multiple stakeholders' perspectives' in the overall health system is the opportunity to reflect on one's own experience of aging (Theme 4: Reflective Learning about Self and Seniors). Whether a healthcare management student ends up specializing in elder care, or chooses a career in a general health delivery setting, understanding the process of aging and having empathy for seniors will be beneficial to strategic planning as well as the selection of implementation tactics. Furthermore, this self-reflection could lead to proactive steps in preparing for one's future as an aging adult.

With this study as confirmation of previous findings about the connections between exposure to and relationship building with seniors and students' positive attitudes about seniors, service-learning and other engagement methodologies should continue to be explored. One important area of continued research on this topic would be longitudinal tracking of 10 or more years on variables such as long-term career choice, job satisfaction, and compensation rates.

Service-learning augments the course curriculum by providing students and teachers with real-life opportunities to apply theory to practice. Incorporating the use of weblog technology is an effective way to involve students deeply in the reflective process while they participate in service-learning and can be used as a source of data for researchers to evaluate service-learning experiences. The service-learning experience can be transformational, giving health administration students the opportunity to critically reflect, learn from their mistakes, discover their own untapped potential, adjust attitudes and discover previously unexplored areas of career opportunity. Learning through experiences not only engages students while in the moment of service-learning, but also offers positive personal and professional development that can potentially be sustained for a lifetime. The application of service-learning to workforce development in a focused area such as elder care for health providers should continue to be developed, enhanced and assessed for long-term impacts.

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Table 1

Weblog Theme Counts and Example Commentaries

Theme (categories) and Example Quotes (placement site)	Senior Center	Senior Residence	Total Coded Comments in Theme/Category
1. Positive interactions with seniors “I had always wanted to try knitting.... I never knew anyone who would have the patience and the ability to teach me, but then I found two great ladies who were able to do that. For two seniors, they had the patience and the coordination to work with someone who had no clue about knitting.” (Senior Center) “...she told me about the many places she’s lived in and traveled to, her experiences during World War II and the Great Depression, her current interests, and today’s current events. I have to admit, I learned so much about my partner and American history itself during my discussion with her. I really enjoyed it!” (Senior Residence)	60	93	153
2. Positive feelings (excitement; fun; appreciation; happiness; passion; love; bittersweet feelings; comfort with people, the work, and the surroundings) “I am so appreciative of the fact that my partner likes me so much, and I feel the same way for her!” (Senior Residence) “I feel really happy to see the seniors exercising because it will help them stay healthier.” (Senior Center)	74	57	131
3. Attitudes/behavior toward seniors (personal development, career development, misperceptions realized, emotional reactions) “Once I entered that room and watched them perform in front of us I just couldn’t stop smiling. Right then and there, I knew that I was going to enjoy myself here.” (Senior Center) “...a resident went up to her saying, ‘I want to have a Facebook page,’ and now there’s a class where residents can learn how to make one. I thought that this was pretty cool and it shows how the residents are just like us despite the age differences.” (Senior Residence)	66	44	110
4. Reflective learning about self and seniors “I parked my car about 10 feet away from the main entrance so I was able to see a few seniors go inside. Once again I started to think about what is going to happen to me once I become a senior?” (Senior Center) “I had made a new friend with.... and that I have a better understanding of senior living.” (Senior Residence)	38	39	77
5. Negative Feelings (disappointment, shy, bored, discomfort with work, nervous, afraid, embarrassed, stressed, annoyed, doubtful, sad) “I feel like I’m not good at being around elderly people. So this was like the ultimate test for me. In my head I was asking myself over and over, ‘How should I act? What should I say?’” (Senior Residence) “They moved fast and I couldn’t even follow the rhythm. It was so embarrassing.” (Senior Center)	18	5	23
6. Professional Development “This semester it was brought to my attention from one of my professor[s] to get a minor [in] gerontology. I’ve been thinking about it but now with the experience I’ve gained from this opportunity I will declare the minor. It will open more doors on my field.” (Senior Center) “I’m slowly learning new things about myself and what I want to do in my career in the healthcare field.” (Senior Residence)	11	3	14
7. Observation (character arc—changing attitudes about seniors) “I learned that the word ‘seniors’ has been overlooked by the youth nowadays and I strongly believe that if anyone got the chance to work with these seniors at [Senior Center], they will see that they are just normal people like us who just want to have fun.” (Senior Center) “I felt as if I was talking with people that were my age...It’s a night that I’m never going to forget.” (Senior Residence) “I thought to myself, ‘wow...I have made myself a friend who is OLD!’ It was a dramatic drive over.” (Senior Residence)	8	8	16

Table 2

Follow-up Email Survey Theme Counts and Example Commentaries

Themes and Example Quotes (placement site)	Senior Center (N = 5)	Senior Residence (N = 3)	Total coded comments in Theme
1. Positive Reflections General > "Overall this project affected me in a positive way." (Senior Center) > "My service learning experience was a great learning experience." (Senior Residence)	4	4	8
2. Negative Reflections * General NA (Senior Center) > "I had such high hopes for the development I would attain and working with a Senior and getting the human aspect of people really intrigued me. However, once I got to the location it slowly started falling apart." (Senior Residence)	0	4	4
3. Positive Attitudes about Seniors > "Doing a service learning project has changed my life because it definitely changed the way I look at seniors." (Senior Center) > "I had a great time working with my assigned senior resident at the [Senior Residence] and we were able to make a special connection." (Senior Residence)	7	3	10
4. Professional Skill Development > "I have learned many things that take place on the work field that I wouldn't be able to learn in books." (Senior Center) > "I also learned the importance of scheduling appointments and keeping appointments. I also learned to manage my time between work, school, and my project." (Senior Residence)	2	5	7
5. Impact on Career Choice/Interest > "It has definitely opened up doors for me and I decided to minor in Gerontology. Ever since then I have been volunteering at the Geriatrics department at the ... Medical Center." (Senior Center) > "Before this service learning project, the scope of my career interests were very narrow. This opened my eyes up to the world of assisted and independent living." (Senior Residence)	3	2	5

* All of the negative reflections were from one student's response