

Physical Therapy Students Perceptions of Service Learning Experiences

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Abstract

Introduction: Service learning in higher education is a pedagogy utilized to promote certain aspects of professional development by providing students with experiential learning opportunities and then reflecting on those experiences. This style of engagement brings the student and a community partner together for a shared experience. In healthcare education those encounters often involve other professionals that makes this style of learning rich with the opportunity for interprofessional education (IPE). These two pedagogies, when used intentionally, could provide for more IPE opportunities in healthcare and may improve the educational experience of the student. **Purpose:** At Wheeling Jesuit University (WJU) the Doctor of Physical Therapy program utilizes service learning throughout its curriculum in courses which partner with local, regional, and international community agencies and a variety of professionals. Intentional IPE opportunities are provided. The purpose of this qualitative study was to investigate the impact of these experiences on graduate students in physical therapy at WJU. **Method:** This study included 47 participants, all of who were WJU Doctor of Physical

Therapy students. Each student was asked to fill out a survey after completing the didactic portion of the program, which included identifying the level of participation (local, regional, or international) in the program's service-learning courses and 7 questions that asked for the student's perception of the experience and what was gained through his or her participation. The responses were grouped by question and a thematic analysis was completed. Results: The most common overall themes identified include the following: improved communication, improved cultural awareness, improved adaptability, exposure to pediatric care, and opportunities for teamwork. The results suggest that students feel they became more efficient at communication with patients and gained a cultural awareness from their service-learning experience that included interaction and learning from a variety of professionals. The results also suggest that the students feel that the experience improved their adaptability in clinical practice. Conclusion: Service learning experiences that include IPE have a positive impact on the graduate student's perception of skills often used in physical therapy practice. Intentionally incorporating and identifying IPE in service learning experiences can be a valuable and efficient means of promoting professional characteristics in physical therapy students.

Key Words: service learning, interprofessional education, student perceptions, physical therapy education outcomes.

Background

Recent trends in higher education have shifted towards including cultural and socioeconomic sensitivity in various universities' curriculums. Recognizing that there have been gaps in traditional learning methods, schools have begun to implement service-learning programs into the educational process. Service learning is a type of experiential education in which students deliver services to underserved communities and then reflect on their involvement in such a way as to gain an understanding of course content, the discipline, and its relationship to social needs, as well as an enhanced sense of civic responsibility (Hatcher, 1997). According to Curtin et al (2013) curriculum integration of global learning, social consciousness, and global cultural competence development is needed in order to create a well-rounded education for the student. Service learning can certainly contribute in this area. Carefully implemented and managed service-learning programs can enhance the learning experience for students and produce socially responsive healthcare professionals (Kruger, 2015).

Service learning promotes professional development by providing students with an out-of-the classroom experience at the local, regional or international levels. There are several important components of a service-learning program. The most significant component is the process of reflection, which allows students to form their own ideas about their experiences (Claver, 2015). This reflection facilitates a bridge between the service experience and educational goals. Another important component is that communities of different socioeconomic statuses work together to share resources and ideas in order to find solutions to local issues (Pechak, 2014). Studies have shown that students who participated in a service-learning program have found it highly beneficial for their personal and professional development (Claver, 2015; Cooke, 2014; Menamin, 2010; Bhatay, 2011). It has been reported that service learning has impacted students' specifically in the areas of self-awareness, self-recognition, professional transformation, enhancement of professional development and academic outcome (Cooke, 2014; Menamin, 2010).

The majority of qualitative research in service learning has focused on examining the process of student growth and learning. Bhayat et al (2011) used an open-ended questionnaire to determine the impact of service-learning experience on students. Their finding suggested that service learning positively impacted these students and enhanced their personal growth and social responsibility by exposing them to the needs of rural and urban communities. Another study by Adler (2010) used a combined qualitative and quantitative method to evaluate service learning and its impact in the specific areas of development of knowledge, skills and confidence in performing services. The results of the study found that both sets of data, qualitative and quantitative, showed positive gains in students' knowledge and confidence. Yet there remains limited qualitative research that examines the impact of service learning on its participants and very few studies that examine the impact of service learning on graduate students in physical therapy.

In addition to service learning, there has been an interest to include interprofessional education (IPE) into healthcare education, since it is common to work in the clinic, collaboratively, with members of a healthcare team. The current literature suggests that IPE is valuable and effective at improving care management, patient satisfaction, collaborative behavior, and reduction of clinical errors (Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013). It has been suggested that implementation of IPE integrated into service-learning experiences is very effective. Completing an IPE experience through service learning has been shown to improve a student confidence working in multidisciplinary teams and understanding of other professions educational training and expertise (Infante et al, 2015). This study also reported that giving students a vehicle to work collaboratively with other healthcare professionals under faculty supervision

enhances students' knowledge and appreciation of other disciplines, which is core to IPE. The subjects in this current study were immersed in this manner. The Commission on Accreditation in Physical Therapy Education now includes IPE as a required standard in physical therapy curricula, which makes it an emphasis of physical therapy education (CAPTE, 2015). Interprofessional education done in conjunction with service learning may provide an effective and efficient means for meeting IPE and other curricular needs in healthcare education.

PURPOSE

The purpose of this qualitative study was to gain information on the impact of service learning experiences that utilizes an IPE approach in the graduate education of physical therapy students who are exposed to a variety of service learning/IPE experiences throughout their education.

METHODS

Subjects

This qualitative retrospective analysis included a cohort of forty-seven participants (27 female and 20 male) who were enrolled in a doctorate program in physical therapy. The participants ranged in age from 20 to 29 with an average age of 22.6 years and were predominately Caucasian (95.3%). All participants completed some level of service learning with an IPE component.

Procedure

Students at Wheeling Jesuit University are required to participate in a local service-learning course during their first year of study. During the second year of study the students are required to participate in either a regional or international service-learning course. The experiences during the second year are carried out in one of the following locations: Appalachian region in West Virginia (regional), Yucatan Peninsula of Mexico, Chimbote Peru, Petionville Haiti

(international). The international service-learning experiences consisted of providing healthcare services to children and adults, instructing community partners, touring the region, and learning about the local culture. The regional service-learning experiences consisted of providing healthcare services to children with disabilities who attended a program on the use of assistive technology (Camp Gizmo), visiting health centers who provide services to the people in the area, providing community education on selected health issues, and learning about the Appalachian culture. The interprofessional faculty for the service-learning courses included physicians, nurses, educators, religious, medical equipment providers, social workers, audiologist, and therapists in physical, occupational, and speech therapy. This group of professionals served as preceptors for the physical therapy students who worked along side the team of providers in their patient and community interactions. Patient management and community education were discussed with a variety of providers and problem solving was done with a multidisciplinary approach.

For this study the participants individually completed a survey during an exit interview, which occurred 6 months to a year after participating in their service-learning experiences. The Institutional Review Board at Wheeling Jesuit University approved this study

Instrument

The survey (See Table 2) was constructed by a faculty member with 17 years of service-learning experience and publications in the field. Questions (#2 through #7) were aligned with the student learning objectives of the courses in service learning. The questionnaire consisted of eight questions, seven of which were open-ended reflection questions. (See Appendix) To ensure content validity, Wheeling Jesuit University and other associate faculty who participate in the service-learning courses reviewed the survey questions as content

experts. Face validity was obtained for each question through round-table and face-to-face questioning with content experts. Each question from the original survey was included in data inclusion with open-ended responses to ensure opportunity for experiential and emotional student responses.

Data Analysis

Surveys were completed by the cohort and collected during one class period. A third party removed the names from the surveys to protect the participant from identification and to eliminate bias in the analysis. Two investigators then reviewed the reflections and entered the data into a spreadsheet. The first question on the survey identified the location of the participant's second year service-learning experience (all students, in their first year, are required to participate in the local service learning courses that occur in the local community). This question was not analyzed for a common theme. The responses from the opened questions, questions, two through eight, were analyzed and a single theme was extracted for each survey response. Themes for each question were then compared between regional and international service-learning experiences. Each researcher independently reviewed the surveys to identify participant perspective themes. The two researchers the compared themes to ensure agreement and finalized a thematic analysis was completed. Code words were used such as "communication", "pediatrics" and "culture" to place subject responses into the appropriate response category. This is the common method for thematic analysis in a study of this kind and has been used in the literature previously (Bradley, Curry, & Devers, 2007).

RESULTS

Forty-seven surveys were returned (100% response rate), 46 surveys were used in the study (98% completion rate);

one survey was excluded because the responses were illegible. Qualitative results in the form of open survey response are most appropriate for studies of this type. The most common overall themes identified include the following: improved communication (reported 50 times) improved cultural awareness (reported 43 times), improved adaptability (reported 12 times), increased exposure to pediatric care (reported 18 times) and opportunities for teamwork in the healthcare setting (reported 16 times) (see Table 1)

The theme of improved communication was the most prevalent response by participants. This theme includes the participant's improvement in his or her ability to communicate across language barriers, communication with the pediatric population, identify and appreciate non-verbal communication skills, as well as communication with fellow healthcare professionals.

The second most common theme was an improvement in cultural awareness. Participants traveled to a new environment and experienced forms of poverty and cultural diversity that many of them had not previously experienced. Participants in the international trips commented on the distinct differences between healthcare systems in the United States of America and the country they visited. Many participants noted the lack of accessibility to services and funding for health care, especially physical therapy. Participants also reported that they now have a new appreciation of other's cultural practices and that the experience made them more sensitive to this aspect of patient care.

The theme of adaptability appeared numerous times throughout the responses. The participants learned how to adapt to a new environment, treat patients with limited resources and work with unfamiliar health conditions. They also realized that they could adapt their daily routines with limited

personal services or material items.

Participants also frequently reported that these service-learning experiences increased their exposure to the pediatric population and the unique health conditions associated with this age group, such as cerebral palsy. Participants reported learning how the evaluation process differs when treating a pediatric versus an adult patient and how to create an individualized treatment plan for children, making service delivery engaging and enjoyable.

Immersion in the experience also resulted in many thematic reports of experience in teamwork in the healthcare setting with other healthcare workers. Inter-professional collaboration was a large part of this experience and the students' reflections echoed this aspect of the program.

The results were analyzed for themes by question as well. The thematic analysis for each individual question is as follows. For question 2: "What clinical skill did you learn or develop from this experience?" Forty-five percent of the responses centered around communication. The second most common theme for question 2 was pediatric care. For question 3: "How did this experience help you to understand a topic presented in class?" This question was found to have 2 common themes. These include: pediatric care and cultural competence. For question 4: "Throughout this experiential learning what did you learn about yourself? This question had answers that commonly reflected gratitude and the student's adaptability. The theme of gratitude included responses such as, "I learned to be more humble and that I took numerous things for granted" (participant #6). Adaptability included a student being able to treat patients in new environments with minimal equipment available. For question 5: "What did you learn about working with other people in healthcare?" This question had one common theme of teamwork. Many

of the students reported a new appreciation for working with various healthcare professionals as a team to provide appropriate patient care. For question 6: "What did you learn about working with people from a different cultural or socioeconomic background?" The common themes included learning about cultural practices and effective communication. Question 7 stated: "What skill or insight will you use in your clinical practice that is related to this experience?" The most common theme for this question was communication. The responses to this question included answers such as "communication with individuals from different socioeconomic/educational backgrounds" (participant #36). Question 8: The final question on the survey asked participants if there was anything that should be changed for future service-learning experiences in their respective locations. The most common answer to this question related to organization dynamic, such as timing around other classes, fulfilling required clinical rotation schedules while participating in the experience, and scheduled time to meet with other students on the experience who are working at different geographical sites.

CONCLUSIONS

This research shows that service-learning experiences that incorporate IPE can be a beneficial experience for physical therapy students. Service learning can help them to become more culturally aware, improve their communication skills, develop their clinical knowledge, as well as learn how to adapt to various environments. The opportunity to learn and provide physical therapy through a service-learning/IPE experience can aid in the development of a better healthcare provider. Interestingly, the themes identified were similar for both the international and regional experiences, which support the idea that service learning with IPE could be utilized at either level with the expectation that the students will benefit

in similar ways.

The results of this study suggest that students feel they have become more effective with communication with patients and gained a cultural awareness from their international service-learning experience. For many of the students this was their first time in a foreign country. The language barrier was difficult for some of the students and they had to learn how to use an interpreter and use more effective nonverbal skills to communicate with the people they encountered. Communication seemed to be a common theme possibly because students had to focus on non-verbal communication, on the cross-cultural communication, and communication between people who do not share a primary language.

The conclusion that students benefit from service learning in a positive way is also supported in the literature (Kruger, 2015; Pechak, 2014; Menamin, 2010; Bhatay, 2011; and Adler, 2010). Several of these studies showed that service learning enhances professionalism and clinical performance (Kruger, 2015; Cooke, 2014; Menamin, 2010; & Bhatay, 2011). In this current study students also reported an improved awareness of cultural competence (Questions #3 and #6) and reported improvements in items such as communication (Questions #2 and #7). These outcomes were also reported by Curtin et al (2013). Students also reported the use of teamwork while performing physical therapy services as major themes from the experience (Question #5). This is supported by previous studies on service learning, including Adler's (2010) work, in which students showed positive gains in knowledge and confidence when delivering services. Improved teamwork was found to be one of the results reported in the literature previously on IPE experiences delivered with service learning (Infante et al, 2015). This study shows that this can also occur in physical therapy education.

RECOMMENDATIONS

From the positive responses about the perceptions of a service-learning experiences in the physical therapy curriculum, it is recommended that service-learning be added not only to other physical therapy program curricula, but be considered for inclusion in other health-sciences curricula. It is also recommended that service-learning experiences include IPE to facilitate and effective and efficient learning experience. There is a growing awareness that IPE in higher education is an effective means to promote specific clinical behaviors after graduation. Implementation of IPE, integrated into service learning experiences, has been shown to be very effective in improving student confidence in working together in multidisciplinary teams and improving the understanding of other professions training and expertise (Infante et al, 2015). This study supports those findings and shows overwhelmingly that students who participate in service learning with IPE perceive an improvement in their communication and cultural awareness. Participation can also provide an opportunity to learn about patient care with populations that have limited exposure in healthcare curriculums for general practitioners (i.e. pediatrics).

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Table 1: Reported Themes Post Interprofessional Service Learning Experience.

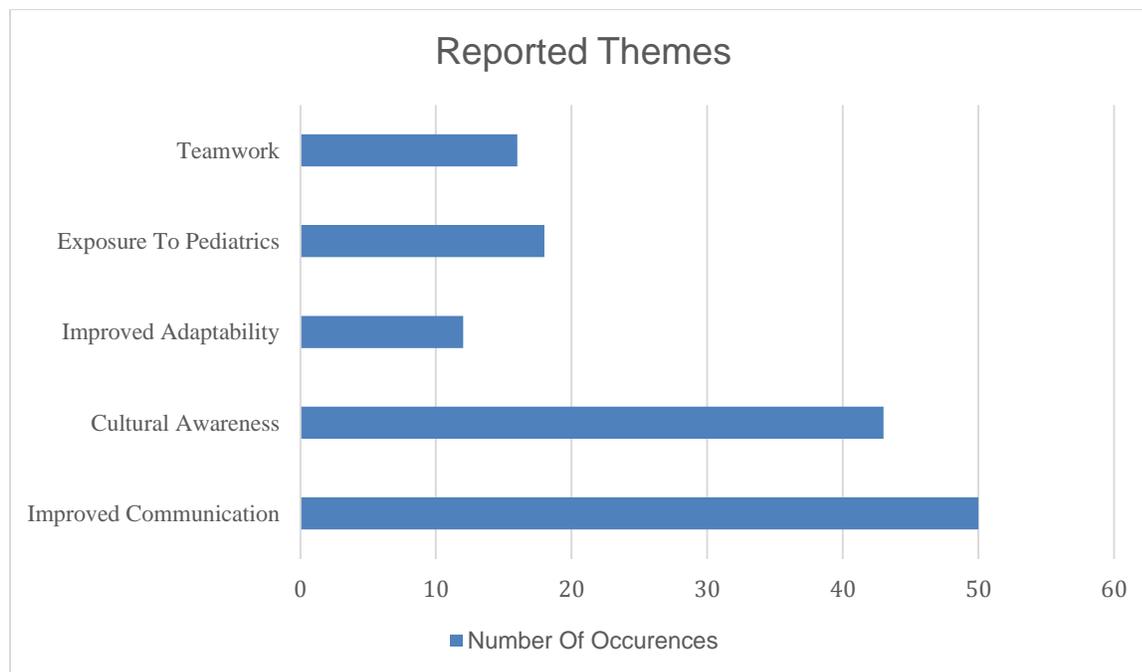


Table 2: Service Learning Focus Group Questionnaire

Student's name: _____

1. Service Learning Experience in which you participated: (circle all that apply)
Local Regional ISL Merida ISL Peru ISL Haiti
2. What clinical skill did you learn or develop from this experience?
3. How did this experience help you to understand a topic presented in class?
4. Through this experiential learning what did you learn about yourself?
5. What did you learn about working with other people in healthcare?
6. What did you learn about working with people from a different cultural or socioeconomic background?
7. What skill or insight will you use in your clinical practice that is related to this experience?
8. How can we improve this experience for future students?