

Student Benefits Following an International High-Impact Practice Service-Learning Experience

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Introduction

The use of high-impact practices (HIPs) in education has been shown to increase rates of student retention, engagement, and learning. The Association of American Colleges and Universities has identified 10 HIPs shown to be beneficial to college students (Kuh, 2008). One type of HIP that has been shown to be effective is diversity/global learning. These programs help students explore cultures, life experiences, and worldviews different from their own and often examine difficult racial, ethnic, and social justice issues. Often, these programs are enhanced by global community experiential learning/study abroad. Another type of effective HIP is service-learning. In these experiences, students participate in experiential learning as an instructional strategy. Students can participate in applied learning in a real-world setting. The HIPs of global- and service-learning initiatives can be effective in preparing students to be culturally competent and in developing interprofessional skills. They are effective because they require a greater time commitment from the student, center around meaningful topics, expose students to greater diversity, and allow students to directly apply their knowledge (Kuh, 2008).

International study abroad programs have been shown to provide students with many academic and personal benefits. Research investigating these benefits have demonstrated positive impacts on student learning, cultural diversity, personal growth, and social justice issues (Bell & Anscombe, 2012; Edmonds, 2010; Plumb & Willis, 2018). Additionally, students experience a greater understanding of their discipline of study (Plumb & Willis, 2018). One of the greatest benefits for students is their

Abstract

The use of high-impact practices (HIPs) in education has been shown to increase rates of student retention, engagement, and learning. The purpose of this survey research was to examine students' perspectives of international service-learning experiences and their readiness for interprofessional learning. Students from two Universities (N=56) traveled to either Guatemala or Honduras for a one-week, service-learning experience and completed three questionnaires: Readiness for Interprofessional Learning Scale (RIPLS), International Service Learning (ISL) Evaluation Survey, and Health Professions Schools in Service to the Nation (HPSISN) Service-Learning Survey. Total RIPLS score was positively correlated to total ISL score ($r=0.47$, $p<0.001$). HPSISN sub scores 'perspective about service-learning' and the 'influence of service-learning on future work' were positively correlated ($r=0.31$, $p=0.02$), as were 'future work' and 'attitude toward community involvement' ($r=0.40$, $p=0.002$). Three themes emerged from the qualitative survey questions: students 1) were changed by the experience, 2) gained a stronger cultural awareness, and 3) overwhelmingly described the experience positively and want to continue service work. Students who participate in international, service-learning experiences are open and accepting of interprofessional learning, value hands-on learning, report enhanced cultural awareness, and experience personal growth.

enhanced understanding of cultural competence and cultural awareness (Ballesta & Roller, 2013; Carpenter & Garcia, 2012; Christaldi & Bodzio, 2015).

Research that has investigated the use of service-learning in higher education has shown evidence to support how it can facilitate deeper learning and hands-on experiences provided through a unique learning environment outside of the traditional classroom (Kuh & O'Donnell, 2013). Benefits of service-learning to the student include improved social skills and greater confidence and skills to work (Collins et al., 2019; Mason & Dunens, 2019; Rosenkranz, 2012). In addition, the community and/or partner involved with the service-learning project can also experience tremendous benefits such as improving the relationship with the community and increasing the community capacity (Seifer, 1998).

Reflection, or intentionally dedicating time to critically consider an experience, is an essential component of learning (Owen, 2016). Several works have emphasized the importance of reflection in the service-learning/HIP experience, stating reflection is needed to realize and reap all benefits of the experience (Amerson, 2014; Bowland et al., 2015; Mitchell et al., 2015; Anderson Elverson & Klawiter, 2019). According to Schmidt and Brown (2016), "reflection about experiences helps students make connections to previous learning so they can apply their ideas to new situations (p.101)." Additionally, there is an emphasis on having students evaluate "the what" and "the how" throughout the reflection process (Schmidt & Brown, 2016, pp. 102-103). By using purposeful and meaningful reflection, students can achieve a higher potential in their undergraduate education (Schmidt & Brown, 2016).

The purpose of this survey research was to examine the perspectives of students regarding their international service-learning experience and readiness for interprofessional learning.

Methods

Undergraduate and graduate students from two different Universities (N=56) participated in this study. Students were selected based on their application to participate in an international service-learning experience. Students traveled to either Guatemala or Honduras for a one-week, medically-focused service-learning experience as part of an academic course. In addition, students were asked to reflect on their experience verbally during debriefing sessions as well as through written journal entries to integrate their experience. Following the completion of their experience, students completed three questionnaires: The Readiness for Interprofessional Learning Scale (RIPLS), The International Service-Learning (ISL) Evaluation Survey, and The Health Professions Schools in Service to the Nation (HPSISN) Service-Learning Survey.

The Readiness for Interprofessional Learning Scale (RIPLS) was developed to assess the attitudes and perceptions of students to determine their readiness for interprofessional learning. The RIPLS is a 19-item tool including a 5-point scale. The tool has 3 subscales: teamwork and collaboration, negative and positive professional identity, and roles and responsibilities. The questionnaire has a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree) with some reverse-scored items. High scores indicate good readiness for interprofessional learning (Parsell & Bligh, 1999). The RIPLS is widely-used and has been shown to be one of the most

psychometrically validated instruments for assessing readiness for interprofessional learning. It can be used in an academic context and can detect differences among student demographics such as gender (Lie et al., 2013; Oates & Davidson, 2015; Thannhauser et al., 2010).

The International Service Learning (ISL) Experience, Course, and Trip Evaluation Survey was created by the researchers for this study and before it was used, it was reviewed by an expert in the field. Participants were asked to rate the value or benefit using a four-point Likert scale ranging from no value/benefit (one) to significant value/benefit (four) of 12 statements/categories as they relate to the student's participation in the ISL experience. Examples of these statements/categories include: "Improved ability to work in an interprofessional team;" "Greater understanding of the impact of culture on nutritional status and overall health;" and "Greater understanding of cultural norms (e.g., eye contact, interpersonal space) and how they may influence communication." Additionally, this survey included three open-ended questions pertaining to students' self-awareness of their own culture, their thoughts on how the experience may affect their future, and were asked to provide an example of how the ISL experience enhanced their cultural knowledge and/or skill. Lastly, participants were asked if they would recommend the experience and, if they had to do it all over again, if they would participate in the experience.

The Health Professions Schools in Service to the Nation (HPSISN) Service-Learning Survey is a 33-item survey used to evaluate the integration of service-learning into health professions education. The evaluation of this type of education attempts to examine the impact of service-learning on students and dives into how the program prepares students for professional careers. Evaluation of these programs has shown that service-learning is a strong instrument and relates to students' attitudes toward the role of service in their professional careers (Gelmon et al., 1998).

Data were analyzed using SPSS Statistics, version 26.0 (IBM, Armonk, NY). Descriptive data are presented as frequencies and means \pm SD. Chi-square was used for categorical variables, and analysis of variance (ANOVA) was used for continuous variables to examine any differences between the two schools. To examine relationships among variables, Pearson correlations analysis was used. Finally, a significance level of $p < 0.05$ was used for main effects.

The qualitative participant statements in all three instruments were transcribed verbatim. They were examined by three researchers through line-by-line and focused coding (Charmaz, 2014). The coding of the qualitative statements was then formulated into overarching themes.

Results

Over the last four study abroad trips, participants have traveled to either Honduras or Guatemala as part of a one-week international service-learning experience (N=56 total surveys completed; n=39 to Guatemala, n=17 to Honduras). Participants were mostly White (n=46), young women (n=51), studying nutrition (n=29), but others came from a variety of academic majors. Full participant demographics can be found in Table 1. There were no differences between the two schools in any of the demographic

characteristics examined, and all participants were surveyed upon their initial experience.

Table 1

Demographic Characteristics of the Participants

	N	%
Gender		
Female	51	91
Male	5	9
Major		
Biology	1	2
Psychology	3	5
Nursing	3	5
Nutrition	29	52
PhD Human Development	1	2
Physician Assistant (PA)	2	4
Pre-PA	9	16
Pre-PA + Nutrition	1	2
Speech Pathology	3	5
Other	3	5
Race/Ethnicity		
African American	1	2
Asian	1	2
Asian American	3	5
Caucasian, White	46	82
Hispanic	4	7
Middle Eastern, South Asian	1	2
Age, years	22.1±2.6	

Quantitative Data

There were no differences between the two schools in any of the total questionnaire scores (HPSISN, RIPLS, or ISL), the means of which are shown in Table 2.

Table 2*Participant Scores on Questionnaires*

	Total Score mean \pm SD (Sample median)	Score Scale (Sample min-max)
HPSISN (N=56)	105.0 \pm 9.0 (106.5)	0-125 (60-121)
RIPLS (N=56)	76.7 \pm 3.1 (77.0)	19-95 (65-82)
ISL (N=55)	59.1 \pm 1.4 (60.0)	0-60 (55-60)

Relationships between Questionnaire Scores and Subscores

Pearson's correlation analysis was used to examine relationships between questionnaire scores and subscores. While total HPSISN score was not correlated with either RIPLS or ISL scores, total RIPLS score was positively correlated to ISL score ($r = 0.47$, $p < 0.001$). Age was not related to any of the total questionnaire scores examined, but there was a trend for age to be negatively correlated with RIPLS total score ($r = -0.22$, $p = 0.10$). Relationships between HPSISN subscores (Perspective [perspective about service-learning courses in which you participated], Attitude Community [attitude toward community involvement], Future Work [the influence of your service-learning on your future professional work]) and other Questionnaire total scores (RIPLS, ISL) were examined. HPSISN subscores Perspective and Future Work were positively correlated ($r = 0.31$, $p = 0.02$), as were Future Work and Attitude ($r = 0.40$, $p = 0.002$). These HPSISN subscores were not related to age or the other total questionnaire scores.

Overall Student Participation and Recommendations

Part of the International Service Learning (ISL) Experience, Course, and Trip Evaluation Survey asked students whether they would participate in this type of international service-learning experience again and if they would recommend this type of international service-learning experience to other students. Overwhelmingly, students answered these questions positively. After evaluating all students' responses, 96% ($n = 46/48$) indicated "definitely yes" to whether they would participate in this type of international service-learning experience again and 98% ($n = 47/48$) indicated "definitely yes" to whether they would recommend this type of international service-learning experience to other students.

Qualitative Data

All three surveys provided students with an opportunity to leave qualitative feedback regarding their experiences. Overall, three themes emerged after coding and evaluating the written qualitative data for thematic development.

Students were changed by the experience.

Students discussed how participating in the international service-learning experience changed them in many ways. They felt that the experience gave them an opportunity to apply the knowledge that they learned in the classroom. They mentioned feeling the experience helped them to grow and gain additional skills that they would have otherwise not been able to gain. Finally, several students discussed how participating in this experience gave them the confidence to continue to work outside of their comfort zones.

Students gained stronger cultural awareness.

An important lesson that many students discussed was having a greater understanding of other cultures and how they differ from what they are used to. Many students indicated that they learned to appreciate other cultures and recognized that the cultural differences we have are fine. Additionally, students discussed how visiting these international locations gave them a better appreciation for what they have and a better realization of true global poverty. Finally, students discussed how it was not difficult to work through language barriers. They discussed how non-verbal communication can be effective in communicating with those who speak a different language.

The experience was overwhelmingly received as positive and students want to continue this type of work.

Another recurring theme throughout the qualitative data was that students want to continue to participate in service-learning experiences. This opportunity has strengthened their desire to work in global/public health and/or community nutrition areas.

Quotes supporting the three qualitative themes can be found in Table 3.

Table 3

Qualitative Quotes

Theme 1. Students were changed by the experience.	Theme 2. Students gained stronger cultural awareness.	Theme 3. The experience was overwhelmingly received as positive and students want to continue this type of work.
“I loved being able to apply what I have been learning into a real-life setting.”	“This service learning experience was a great way to meet nutritional needs in a non-traditional setting.”	“By far one of the best decisions I've made in my entire life. My service experience has dictated my plan for the rest of my life.”
“Having the hands-on experience reinforced some of the things I have learned in the classroom, this course and others.”	“Experience in the culture in Honduras has shown me that our world is full of so many different types of people who are all going through different problems, and the problems I face might be a problem that someone else would rather be facing.”	“This experience has made me want to work with others even more and provide help in any way I can.”
“Loved this experience, hands on work needs to be implemented into more classes in school. A wonderful learning opportunity.”	“Every culture is different. One is not better than the other. Where one culture has limitations, another culture may not be limited there but somewhere else.”	“This experience makes me want to pursue a career in helping those in need with their nutritional problems.”
“I loved having the opportunity to apply the knowledge from class hands on. It gave our learning a purpose and meaning. It also provided me w/ the chance to build a relationship with my instructors and classmates.”	“I never knew how rural and poor Guatemala was but yet they have so much in love and spirit.”	“This experience has made me want to include mission trips into my career.”

Conclusions

Higher education is constantly changing to meet the needs of more students. Previous research has shown the tremendous benefits that HIP experiences can have on students (Bell & Anscombe, 2012; Collins et al., 2019; Edmonds, 2010; Mason & Dunens, 2019; Plumb & Willis, 2018; Rosenkranz, 2012). Students who participate in an international, service-learning experience are open and accepting of interprofessional learning, value hands-on learning, report enhanced cultural awareness, and experience growth. This type of experience can be considered a transformative experience for students. Additionally, participants believe these HIPs will influence their future professional work. Incorporating global- and service-learning opportunities into the curricula of future healthcare professionals elicits overall student, and potentially professional, success. Additionally, providing students with an opportunity to be reflective about their experience and creating meaningful discussions throughout the process can facilitate and enhance the overall change that they are experiencing and how this change can benefit them and the community in the future (Helyer, 2015; Owen, 2016).

Future Considerations

The results of this study provide additional evidence to support the use of HIP experiences for students. However, additional components from this study should be investigated in the future. First, the strong evidence supporting the use of reflection during service-learning experiences warrants the evaluation of this process. Students should have the opportunity to discuss how the incorporation of reflection impacted their overall experience and played a role in their learning and future education. Second, students discussed the desire to participate in service experiences in the future. However, it is unknown whether these students have used this international, service-learning experience to inform their career, to be culturally competent practitioners, or to continue this type of work. Interviewing previous participants years after their experience would provide insight into these missing data.

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