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## Long-Term Impact of International Service Learning: Cultural Competence Revisited

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## Long-Term Impact of International Service Learning: Cultural Competence Revisited

### Abstract

As cultural diversity continues to rise globally, there is an evident need for culturally competent care, especially within the client-centered field of occupational therapy. Previous research has shown that occupational therapy doctoral (OTD) students who participated in international service-learning demonstrated an immediate positive impact on their cultural competence. The current study revisits these same doctoral students to examine the long-term impact of international service-learning experiences at six-month, one-year, two-year, and three-year intervals following the initial experience. The researchers conducted a mixed methods study with a pre-test post-test design, utilizing the Cultural Intelligence Scale (CQS), as well as qualitative responses in the form of written reflection. Results emphasized the significant short-term impact on the CQS, with the entire sample ( $N=40$ ) demonstrating statistically significant results immediately after the experience on all four factors: metacognition, cognition, motivational, and behavioral. Metacognition demonstrated significant long-term impact at the three-year and one-year intervals. Other factors of the CQS remained above baseline levels, however, were not statistically significant. It appears international service-learning has an immediate impact but does “decay” over time, encouraging additional experience to solidify change. Implications and limitations are presented.

### Keywords

Cultural competence, pedagogy, service learning

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## Long-Term Impact of International Service Learning: Cultural Competence Revisited

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### ABSTRACT

As cultural diversity continues to rise globally, there is an evident need for culturally competent care, especially within the client-centered field of occupational therapy. Previous research has shown that occupational therapy doctoral (OTD) students who participated in international service-learning demonstrated an immediate positive impact on their cultural competence. The current study revisits these same doctoral students to examine the long-term impact of international service-learning experiences at six-month, one-year, two-year, and three-year intervals following the initial experience. The researchers conducted a mixed methods study with a pre-test post-test design, utilizing the Cultural Intelligence Scale (CQS), as well as qualitative responses in the form of written reflection. Results emphasized the significant short-term impact on the CQS, with the entire sample ( $N=40$ ) demonstrating statistically significant results immediately after the experience on all four factors: metacognition, cognition, motivational, and behavioral. Metacognition demonstrated significant long-term impact at the three-year and one-year intervals. Other factors of the CQS remained above baseline levels, however, were not statistically significant. It appears international service-learning has an immediate impact but does “decay” over time, encouraging additional experience to solidify change. Implications and limitations are presented.

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## INTRODUCTION

Providing culturally competent care, especially in the client-centered field of occupational therapy (OT), is a professional priority as multiculturalism continues to increase globally. According to the Brookings institute, minority groups will represent the ethnic majority in the United States by the year 2045 (Frey, 2018), highlighting the increasing diversity healthcare practitioners will encounter over the next several decades. As defined by Campinha-Bacote (2002), *cultural competence* is an “ongoing process in which the healthcare professional continuously strives to achieve the ability and availability to work effectively within the cultural context of the patient (individual, family, community)” (p. 181). As Royeen and Crabtree (2006) explained, rehabilitation practitioners have their own set of cultural values and beliefs that serve as a basis for intervention planning and implementation. Without intentional effort to understand the client’s personal and cultural belief systems about illness, health, and expectation of outcomes, providing effective care across cultural barriers may prove difficult. Awaad (2003) found that OT as a profession is generally imbedded in Western values and called for an increased focus on cultural competence, including self-awareness and sensitivity to cultural differences, and for practitioners to engage with clients from increasingly diverse demographics. Self-awareness regarding one’s own cultural background as well as a thorough understanding of the client’s perspective is essential to prevent cultural barriers from impacting effective interventions and overall outcomes (Royeen & Crabtree, 2006). Cultural immersion experiences, such as international service-learning (ISL) in OT curricula may help students to examine beliefs, values, and attitudes to provide culturally appropriate care to future clients.

*Cultural intelligence* is defined as an individual’s ability to function within intercultural contexts (Earley & Ang, 2003), and it has the potential to improve through cross-cultural interaction such as ISL (Ng, 2013). Short and St. Peters (2017) explored the impact of ISL on the cultural intelligence of occupational therapy doctoral (OTD) students. Using a one-group pretest-posttest design, researchers utilized the Cultural Intelligence Scale (CQS; Van Dyne, Ang, & Koh, 2008.) to examine cultural intelligence as a construct of cultural competence. The results of this initial effort indicated a statistically significant increase in perceived levels of cultural intelligence pre and post ISL. While the results supported immediate, short-term impact on cultural competence, additional research was suggested to examine long-term impact and maintenance of the identified improvement. Therefore, the purpose of this study was to examine the long-term impact of previously observed short-term improvement in cultural intelligence for OTD students following a week-long ISL experience.

## LITERATURE REVIEW

### International Service-Learning in Medical Fields

Several studies within the health science literature found positive effects of ISL on college students. Bringle, Hatcher, and Jones (2011) defined ISL as a structured academic experience in a different country that typically includes a discipline-specific service activity and cross-cultural interaction, as well as participant reflection on the experience (as cited in Lawson & Olson, 2017). Ford, Neilan, and Moscou (2017)

described multiple benefits of ISL in Guatemala among nursing students. Following the ISL experience, students gained a broader perspective of medical, social, and cultural values as well as increased sensitivity to cultural similarities and differences. Haines, Stiller, Thompson, and Doherty (2017) examined the long-term effects of ISL on three physical therapy assistant students. The students served in Kenya for one month and were interviewed two years later. Common themes derived from interview responses consisted of personal and professional growth as a result of the ISL experience. The participants found the ISL experience empowering, increased quality of life, and increased openness to new people and experiences. Overall, the researchers identified a major philosophical shift in focus of growth from self-centered (before the trip), to practice-centered (immediately post-trip), and then life-centered (two years' post-trip; Haines et al., 2017).

### **International Service-Learning and Cultural Competence in Occupational Therapy**

The development of cultural competence within OT education has also been linked to ISL and domestic service learning opportunities with embedded multiculturalism. Gitlow and Flecky (2005) found that 90% of student participants in a community service learning experience expressed an increase in comfort levels in working among diverse cultures. Humbert, Burket, Deveney, and Kennedy (2011) explored the qualitative perception of OT students ( $n=9$ ) working in international settings. The findings highlighted the perceived value of building personal relationships, or *connectedness*, within the culture, coupled with a theme of conflict regarding making sense of the culture in light of the participant's own personal beliefs and constructs. The study concluded with a practical call for an assessment of how academic programs might support culturally responsive care. Talero, Kern, and Tupé (2015) designed a culturally-focused and evidence-based pedagogical model to be utilized by OT educators. The model provided guidelines for OT educators to prepare students to provide quality therapeutic care within diverse populations with varied occupational demands. Within the model, culture was conceptualized as a central component of human occupation, indicating the need for OTs to understand the complexities involved in the relationship between a client's cultural background and occupational needs. Additionally, OTs should utilize self-awareness to evaluate the impact of their own beliefs and perceptions during cross-cultural interactions and apply that knowledge to clinical practice (Talero et al., 2015).

Short and St. Peters (2017) found that a goal-directed ISL experience involving the provision of seating and mobility services in Haiti had a short-term (immediate) impact on OTD students' ( $n=10$ ) cultural intelligence as a construct of cultural competence. The purpose of the current study was to confirm the short-term impact of ISL on cultural intelligence with a larger sample ( $N=40$ ) and examine long-term impact at six-month, one-year, two-year, and three-year intervals following the initial experience (Short & St. Peters, 2017). Qualitative data was also collected to highlight the participants' perceptions regarding the impact of the experience. The researchers hypothesized that the short-term post-experience cultural intelligence scores in all domains on the CQS would be maintained or increased at six-month, one-year, two-year, and three-year intervals post-experience.

## **METHODS**

### **Study Design**

The researchers implemented an explanatory, mixed-method design with quantitative findings complemented by qualitative findings. This design was chosen to further examine the quantitative impact of ISL on cultural intelligence as a construct of cultural competence, suggested by previous research (Short & St. Peters, 2017), as well as examine the perceived impact on participants for a more holistic understanding. An exempt IRB application, including the purpose of the study, proposed participants, procedures, and instruments was submitted and approved.

### **Participants**

A convenience sample of current and former OTD students from four cohorts at Huntington University who were enrolled in or previously completed OTD 706: Global Missions & Outreach was used for the study. Students in this course were given the choice to participate in a local service-learning experience or serve on an international trip with a partnering faith-based organization. The ISL locations included Haiti, Guatemala, and Romania; however, each trip involved similar provision of seating and mobility services to individuals with disabilities under the supervision of a licensed occupational or physical therapist. Enrollment in OTD 706: Global Missions & Outreach was mandatory for first-year OTD students and all students were invited to participate in the research. However, the respective scores and responses of students who chose not to participate in the study were excluded as involvement in the study was optional.

### **Instrumentation**

The CQS is composed of 20 items and contains four cultural intelligence subscales: four metacognitive items, six cognitive items, five motivational items, and five behavioral items. Participants rate items corresponding to each of the four subscales on a Likert-type scale (1= strongly disagree; 7 = strongly agree; Van Dyne et al., 2008).

To develop and refine the CQS, Van Dyne et al. (2008) operationally defined the four included subscales and developed numerous statements associated with each factor as a means by which to develop the scale. Defined in the context of working cross-culturally, metacognitive cultural intelligence relates to “consciousness and awareness”; cognitive cultural intelligence refers to “cultural knowledge”; motivational cultural intelligence reflects “capability to direct attention and energy”; and behavior cultural intelligence captures “appropriate verbal and non-verbal actions” (Van Dyne et al., 2008, p. 17).

Van Dyne, Ang, and Koh (2009) found moderate correlation among the four subscales across samples in a Singapore population. A subset of participants (n = 204) completed the CQS after a four-month period to reveal longitudinal measurement did not change. Finally, to show evidence of generalization across countries, Van Dyne et al. (2008) conducted research with an American student sample (n = 337), again demonstrating no change and applicability across cultures.

## Procedure

Students who participated in the ISL experience were voluntarily administered the CQS within two weeks before and after the ISL experience. Students in each of the four cohorts were administered the CQS a third time with additional related open-ended questions on Survey Monkey in January 2019. The data collection in January 2019 served as a six-month, one-year, two-year, and three-year follow-up for the spring cohort Class of 2020 (Group A), fall cohort Class of 2020 (Group B), Class of 2019 (Group C), and Class of 2018 (Group D) respectively, to examine the long-term impact on cultural intelligence. The university expanded to dual cohorts during the spring 2018 semester, hence the graduating class of 2020 had both a fall and spring cohort while prior years had a single fall cohort. Students were assigned participant numbers which were maintained on a master list to ensure confidentiality and allowed for data analysis.

After administration of the initial CQS, students in each respective group participated in similar orientation and training consisting of cultural orientation (e.g. demographics, language, history), basic seating and mobility training, as well as dramaturgical simulation of cross-cultural interaction. The cultural orientation was largely informational while seating and mobility training consisted of lecture, equipment demonstration, and case studies. Student participants had only completed one semester of the OTD curriculum at the time of the experiences, so the goal of the seating and mobility training was familiarity with further experiential learning once in-country. The cross-cultural simulations involved goal-oriented tasks among different groups who were assigned differing customs, norms, and behavior, simulating the ambiguity and emotion that often accompany initial cross-cultural interactions.

A qualitative component was developed in the form of open-ended questions to examine cultural interactions and competence since completing the initial experiences. The qualitative questions underwent review and revision by individual researchers for clarity and focus to gauge perceived long-term impact of participants regarding cultural competence. Specifically, questions were designed to align with quantitative assessment, informing participant perception of impact regarding the four subscales of the CQS – metacognitive, cognitive, motivational, and behavioral cultural intelligence:

Metacognitive: How do you evaluate your level of cultural competence?  
Provide an example.

Cognitive: Since the service-learning experience, in what ways has your knowledge of other cultures changed?

Motivation: Have you sought additional experiences with people of other cultures? Provide an example.

Behavioral: Based on your cross-cultural experience, will you or do you practice OT differently? If so, provide an example.

OTD students were invited to participate in the survey via email with the SurveyMonkey link to an online version of the CQS and qualitative questions. An initial email was sent out, followed by two subsequent reminder emails. Implied consent by participation was explicitly outlined in the introduction to the virtual survey. Students were not required to participate in the research and grades were not negatively impacted for non-participation. Participants were not referenced by name in any of the descriptions to maintain anonymity and confidentiality. All data were secured in a locked file cabinet at the university and will be maintained for a period of three years. The researchers utilized a mixed method design with pre-post quantitative measurement as well as post qualitative measurement.

## RESULTS

### Demographics

Thirty-four individuals participated, representing an 89.5% response rate (34/38). The sample was predominantly female (91%;  $n=31$ ) between 22 and 40 years old, consistent with demographic trends within individual groups. Of the 34 respondents, nine attended the Haiti 2016 trip (26.5%), ten attended the Guatemala 2017 trip (29.4%), seven attended the Guatemala 2018 trip (20.6%), and eight attended the Romania 2018 trip (23.5%).

### Quantitative Results

Quantitative data analysis consisted of paired-samples t-tests ( $\alpha < 0.05$ ), comparing means from pre-experience and short-term post-experience administration of the CQS instrument for all four student groups ( $N = 40$ ). The analysis verified statistical significance for short-term CQS increase for all four factors of the CQS, for the entire sample as shown in Table 1.

Table 1

#### Short-term CQS Scores

( $N=40$ )	Pre	Post	p-value	ES
Metacognitive	18.5 ± 3.5	23.2 ± 2.5	<.001*	1.34
Cognitive	18.0 ± 6.7	25.6 ± 5.6	<.001*	1.13
Motivational	24.6 ± 5.7	29.8 ± 4.0	<.001*	0.91
Behavioral	21.3 ± 5.5	28.4 ± 3.4	<.001*	1.29

Mean ± standard deviation for each subscale

ES = Cohen's d effect size statistic

\* indicates p-value less than .05



The long-term quantitative data (as shown in Table 2) was analyzed using the Wilcoxon Signed Rank test due to a smaller sample with an atypical distribution for improved validity. Cohen's *d* was used to determine the magnitude of change for both short-term and long-term posttests.

Table 2

*Long-term Follow-up CQS*

	Pre	Post	Follow-up	Follow-up vs. pre		Follow-up vs. post	
				p-value	ES	p-value	ES
Haiti 2016 (D) (n=9)							
Metacognitive	17.9 ± 3.1	23.8 ± 2.2	22.6 ± 1.5	.01*	1.52	.10	0.55
Cognitive	15.8 ± 5.7	26.0 ± 6.3	19.7 ± 6.6	.26	0.68	.05	1.00
Motivational	26.0 ± 3.4	31.6 ± 2.4	26.1 ± 4.0	.81	0.03	.02*	2.29
Behavioral	19.9 ± 3.9	29.7 ± 2.2	24.0 ± 5.4	.26	1.05	.03*	2.59
Guatemala 2017 (C) (n=10)							
Metacognitive	20.1 ± 1.5	23.0 ± 2.4	23.4 ± 5.9	.10	2.20	.19	0.17
Cognitive	19.4 ± 6.0	26.9 ± 5.5	24.4 ± 5.6	.10	0.83	.31	0.45
Motivational	26.8 ± 5.2	30.9 ± 3.7	28.0 ± 8.0	.72	0.23	.44	0.78
Behavioral	21.5 ± 6.6	28.3 ± 3.7	26.1 ± 7.3	.20	0.70	.76	0.59

Guatemala 2018 (B) (n=7)							
Metacognitive	17.0 ± 2.7	22.9 ± 3.3	22.6 ± 2.9	.04*	2.07	.75	0.09
Cognitive	17.3 ± 5.8	24.1 ± 5.8	17.9 ± 7.7	.50	0.10	.18	1.07
Motivational	23.0 ± 7.2	28.6 ± 5.9	25.4 ± 6.4	.31	0.33	.20	0.54
Behavioral	22.0 ± 4.2	29.7 ± 3.1	25.6 ± 9.4	.35	0.86	.25	1.32
Romania 2018 (A) (n=8)							
Metacognitive	20.0 ± 4.0	24.0 ± 2.6	23.1 ± 3.3	.08	0.78	.32	0.35
Cognitive	23.0 ± 7.6	26.3 ± 6.3	24.1 ± 9.1	.94	0.14	.40	0.35
Motivational	25.9 ± 4.5	29.3 ± 4.3	29.0 ± 4.5	.12	0.69	.87	0.07
Behavioral	25.4 ± 4.1	27.9 ± 4.4	28.1 ± 3.5	.31	0.66	.99	0.11

Mean ± standard deviation for each subscale

N = number of subjects; ES = Cohen's d effect size statistic

\* indicates p-value less than .05

The findings failed to support the hypothesis that the short-term post-experience CQS scores in all domains would be maintained at long-term follow-up intervals. However, metacognition was found to be statistically significant for the one-year (Group B) and three-year (Group D) intervals, suggesting long-term impact in this domain. It should also be noted that though there was decay of the initial short-term gains on the CQS, all four factors remained above initial baseline levels at each long-term interval, suggesting some degree of long-term maintenance.

### Qualitative Results

Qualitative data was analyzed through individual content analysis, coding, and triangulation to identify major themes. Coding followed general procedures recommended by Creswell and Creswell (2018): (a) initial reading of the qualitative data set as a whole, (b) hand coding with labels for potential themes, (c) reviewing labels for

any overlap, (d) grouping labels into themes, (e) distinguishing between major and minor themes, and (f) interrelating themes with quantitative findings. Four major themes emerged from the qualitative data and are presented in order of predominance with representative qualitative statements from participants:

a) Increased Self-awareness

- i. "I have an awareness and appreciation of cultural differences but feel cultural competence is not a single skill that applies to every culture, rather a paradigm that allows one to adapt and modify when appropriate within a given cultural context while maintaining the integrity of one's own culture."
- ii. "...checking my level of understanding, my thoughts and reactions toward the culture, and gauging others' reactions to me within the culture."

b) Acquisition of Knowledge

- i. "My knowledge has improved and I am more comfortable treating and interacting with most cultures because of cultural training and exposure on the trip. I feel I can adapt to most cultures."
- ii. "I gained a wide range of knowledge of the culture after traveling and having the opportunity to experience the culture. The information gained was greater after attending the country than research done prior to the trip."
- iii. "I have learned how those in another culture express their thoughts and emotions to those in the same culture and those in a different culture."
- iv. "My knowledge concerning cultural/religious views of disability has expanded; my understanding of cultural underpinnings as defining the human experience has increased..."

c) Clear and Effective Communication

- i. "...I had patients that spoke Spanish and Chinese and was able to connect further with them using the few words that I knew in their language. At times, we used interpreters, which given my previous experience using them in both service-learning trips, I felt comfortable and feel that it also helped to put my patient at ease."
- ii. "This experience enhanced my communication skills using a translator. I am familiar with Spanish, so I was able to communicate with people in Guatemala on a basic level. However, I only knew how to say "hello" in Chinese, so utilizing the translators while also being respectful to our clients (maintaining eye contact, allowing adequate time for translation and response, etc.) was vital in order to make an impact during our sessions."

d) Translation to Practice

- i. "I definitely will practice OT differently based on my cross cultural experiences. I now understand that it is crucial to provide services based on what the client wants and to respect their wishes even if I don't understand or agree with it".

- ii. "I've always loved cultures but since the experience I have consistently challenged myself to hold a larger world view. I've prioritized living with less and consistently challenge my American way of life. As far as how my cross cultural experience has affected me as an OT, I have chosen to practice OT in an impoverished area to continue to feed that need to do more for the benefit of others, even if that means a sacrifice of my own living situation."
- iii. "...my personal communication/interaction skills have become refined to adjust to cultural considerations".
- iv. "Treating dozens of patients who do not speak English, many Spanish speaking in which I've used a Spanish to English dictionary to communicate so that I more permanently learn the language. ADL sessions to cook a cultural meal for the pt's family who was visiting. ADL dressing to don a hijab. Practicing culturally appropriate social participation for a young girl with autism who is a Jehovah's Witness that wanted to participate in a birthday party at my clinic within the parameters of her religion."

## DISCUSSION

Rapidly changing client demographics necessitate prioritization of cultural competence to effectively practice client-centered occupational therapy (Bastable, Gramet, Jacobs, & Sopczyk, 2011; Campinha-Bacote, 2002). Aggregate pre and post scores from the CQS administration prior to and immediately after (within 2 weeks) for all student participants ( $N=40$ ) provided robust support for prior research (Short & St. Peters, 2017) supporting ISL as a pedagogy to increase cultural competence for OTD students on all four factors of the CQS. However, this impact may have been related to the immediacy and strong emotional connection to the experience with limited time for processing. Additionally, as the ultimate goal of the experiential learning was permanence and translation of cultural competence into future practice, student participants did not yet have the opportunity to apply newfound cognitive, attitudinal, and behavioral learning. Rather, they returned to didactic classroom learning with limited opportunity for clinical application of their new skill set.

While short-term gains were strongly supported by the results for all four factors of the CQS (metacognitive, cognitive, motivational, behavioral), the long-term impact appeared to be more nuanced. Firstly, at all four intervals (six-month, one-year, two-year, and three-year), CQS scores remained above baseline levels, demonstrating some sustained improvement, albeit not all statistically significant. There was a statistically significant increase found in long-term Metacognitive scores at the three-year (Group D) and one-year (Group B) intervals. This may be an indicator of a perception of sustained self-awareness of cultural competence, linked to metacognition as each the evaluation of one's self and thought process. Talero et al. (2015) expressed the importance of self-awareness when evaluating interactions with clients and applying it into clinical practice. The participants may have had a more permanent change in their own perception of cultural competence, however, may have needed additional experience to solidify the cognitive, motivational, and behavioral components. This

seems to align with the idea of theoretical understanding of a particular topic with application needed to develop a permanent skill set and may serve as a framework to guide future cross-cultural experience. Encouragingly, the three-year follow-up participants were in clinical practice at the time of the follow-up CQS administration, providing some evidence of translation into practice.

Qualitative data provided unique insight about how cultural intelligence evolved from each student's perspective. Four themes arose from the qualitative data: (a) self-awareness, (b) acquisition of knowledge, (c) clear and effective communication, and (d) translation to practice. Further supporting the metacognitive impact, self-awareness was a predominant theme throughout all qualitative responses from all participant groups. Increased self-awareness was most often used in the present tense in the responses, showing that the participants readily used this skill in their daily life as practicing clinicians or current OTD students still attending didactic and fieldwork portions of their education. Self-awareness was also frequently used in future tense (i.e. "will be...") showing that participants planned to use this trait in the future in cross-cultural situations as practitioners.

Several codes were identified within the acquisition of knowledge theme: learn, understand, and knowledge. A general increase of knowledge was mentioned throughout the responses. Some students chose to independently research a culture before participating in the immersion part of the trip, therefore increasing their cultural knowledge within their cognitive cultural intelligence. Other students reported gaining knowledge and learning through observation and immersion in the culture itself regarding social norms in different cultural contexts. The experience sparked an increased desire for many participants to learn more about cultural norms, practices, and conventions in future endeavors.

The current study confirmed previous findings that suggested ISL may improve participants' abilities to communicate effectively in a client-centered manner (Lasley, 2017). Participants in the current study overtly indicated a perception that communication skills improved as a result of the experience. Participants often used communication as a means to evaluate cultural interactions and adapt to different situations, implementing effective therapeutic use of self. Students also recognized the importance of nonverbal communication as a strategy to obtain information and feedback from others. While some participants felt that language was still a major barrier to providing culturally competent care, many stated that being able to practice with translators during the service-learning experience was extremely valuable for future practice. Although it is unrealistic to learn all languages, the exposure to translators left students feeling more comfortable in their abilities to communicate with clients across linguistic barriers.

While ISL may serve to increase self-awareness as a component of overall cultural competence, effects may not be sustained without its useful application. Participants expressed that the knowledge, insight and skills they gained from the ISL experience could be translated into clinical practice to best serve clients. Common qualitative

responses included “adapting” and “adjusting”. Students described adapting and/or adjusting treatments, communication strategies, general interactions, use of equipment, and inclusion of family members based on cultural or social norms. Cross-cultural experiences influenced the students’ choice to participate in additional cross-cultural service-learning opportunities to China and Guatemala. In addition, some students planned to work with marginalized ethnic groups (e.g. Native American reservation) after graduation. Furthermore, several participants who are now practicing OTs specifically chose to work in impoverished areas because of the ISL experience.

St. Peters and Short (2018) previously found an ISL experience may have had a positive impact on character traits related to professional virtue. One participant in the current study expressed personal growth through challenging world views, indicating a potential impact on character development. Participants also expressed an increased sensitivity to diversity within the United States regarding language, religion, socioeconomic status, ethnicity, low income housing, criminal history, lack of insurance for therapy, culturally diverse meals, clothing, traditions, and nationality.

According to the quantitative results, there was a significant increase in long-term metacognitive cultural intelligence for participants in Group A (Haiti 2016), who were in clinical practice when the study was implemented. These results are supported by the qualitative data which expressed the utilization of specific skills in clinical practice gained during the service-learning trip. The data suggest a translation of improved cultural competence into long-term clinical practice, promoting client-centered care across cultural boundaries.

The unique cross-cultural experience presented appears to have value as a pedagogical method imbedded in OTD curriculum. However, there are practical considerations including cost, logistical support, administrative support, as well as risks posed by international travel. While the researchers strongly advocate for similar experiential opportunities within OT programs, thorough critical appraisal is needed before implementation. Regardless, cultural competence must be prioritized to meet changing client demographics (Bastable et al., 2011) and remain consistent with the client-centered values of the profession (AOTA Code of Ethics, 2015).

### **Limitations**

Internal threats to the study included researcher bias and the location of each ISL experience. A small sample size and disproportionate gender ratio (i.e. more females than males) represent external threats that limit generalizability. Additionally, all participants were students from the same university who voluntarily participated with a faith-based organization, further limiting generalizability. As both the university and partner organization were faith-based, this may have impacted results with the sample reflecting participants who already have some familiarity or experience with similar service. Some participants in this study had additional service-learning experiences between the conclusion of the initial service-learning trip and the time of the long-term post-test survey, which may have altered CQS scores.

## Future Research

Future studies might compare perceived impact on cultural competence before and after both domestic and international cultural immersion experiences. Additionally, researchers could explore the role online learning can play in acquiring knowledge and skills impacting cultural competence that can translate into practice.

## CONCLUSION

In conclusion, the results of this study further solidify prior research supporting ISL as a pedagogy to improve cultural competence for OTD students. Evident short-term impact appears to decay with some support for metacognitive cultural intelligence as potentially more permanent, with related self-awareness as a predominant qualitative theme. Similar additional cross-cultural experiences are recommended to solidify learning for permanent impact to promote culturally-competent future occupational therapy practitioners.

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