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2021

## Intercultural Competence Gains from Study Abroad in India

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DOI: <https://doi.org/10.30707/TLCSD5.2.1624983591.676961>

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### Recommended Citation

Krishnan, Lata A.; Diatta-Holgate, Horane; and Calahan, Charles A. (2021) "Intercultural Competence Gains from Study Abroad in India," *Teaching and Learning in Communication Sciences & Disorders*: Vol. 5: Iss. 2, Article 6.

DOI: <https://doi.org/10.30707/TLCSD5.2.1624983591.676961>

Available at: <https://ir.library.illinoisstate.edu/tlcsd/vol5/iss2/6>

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## Intercultural Competence Gains from Study Abroad in India

### Abstract

Participation in a study abroad program to Zambia with intentional intercultural activities embedded in the course curriculum has been shown to enhance cultural competence as measured by the Intercultural Development Inventory (IDI®) (Krishnan, Masters, Holgate, Wang & Calahan, 2017). The purpose of this study was to assess whether a new program to India, developed using a similar model, was effective in increasing student intercultural competence and to compare student outcomes with the previous program to evaluate possible differences in outcomes related to the destination country. Participants included 21 students who participated in the *SLHS in India* study abroad program, and 20 students who have not travelled abroad. Quantitative data included a pre- and post-program administration of the IDI® for both groups. Qualitative data included pre-departure and final reflection papers completed by participants in the intervention group. Results indicated a significant increase in intercultural competence in the intervention group and no change in score in the control group participants. The increase in group score is similar to increases seen in students who had travelled to Zambia. Results indicate that an intensive, service learning study abroad program can be a mechanism for students to enhance intercultural competence, possibly regardless of destination country.

### Keywords

Cultural competence, intercultural learning, study abroad

### Cover Page Footnote

The authors gratefully acknowledge all the individuals and organizations involved in the success of the study abroad program including faculty and staff at each organization in India, individuals and families that we worked with in India, the program co-leader Ravi Krishnan, students who participated in the SA program and control group participants.

## Introduction

Cultural competence has been recognized as an important skill by the American Speech-Language-Hearing Association (ASHA), and graduate clinical programs in speech-language pathology (SLP) and audiology are required to include instruction in this area (Council on Academic Accreditation; CAA, 2017). Although varied definitions have been used, here we define intercultural competence (ICC) as the “capability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities” (Hammer, 2019, p.6). The CAA (2017) in Audiology and SLP includes cultural competence as a requirement in its list of professional practice competencies (Standards 3.1.1A and 3.1.1B) emphasizing the importance of understanding the impact of one’s own culture as well as of the individuals being served on the ability to deliver effective care. Likewise, the ASHA Council for Clinical Certification (CFCC; 2018a; 2018b) mandates that individuals applying for clinical certification demonstrate knowledge and skills to provide developmentally, linguistically and culturally appropriate services to individuals from diverse backgrounds. The emphasis on providing culturally sensitive healthcare services is increasing as the population demographics in the United States change. More than one quarter of the population is non-white and more than 20% speak a language other than English in the home (U.S. Census Bureau, 2019). However, 91.7% of the > 200,000 ASHA members and affiliates are white, only 6.5% are bilingual service providers, and 79.6% of the bilingual service providers are also white. Additionally, only 8.3% of ASHA members and affiliates identify as racial minorities compared to 27.6% of the U.S. population (ASHA, 2019), further emphasizing the need for the development of ICC in students and professionals in the field. The purpose of this study was to explore the effectiveness of a study abroad program for increasing the cultural awareness of students in speech, language, and hearing sciences.

### **Current pedagogical approaches to teaching cultural competence.**

The importance of training students in providing culturally sensitive care has been recognized across healthcare professions. However, across healthcare professions such as nursing (Long, 2012), medicine (Kripalani et al., 2006), and speech and hearing (Stockman et al., 2008), there are no guidelines or clear empirical evidence regarding various instructional approaches used to teach cultural competence.

### ***Infusion across the curriculum and dedicated courses.***

Among accredited audiology and SLP programs in the United States, the most common instructional model is to infuse multiculturalism throughout the curriculum (Hammond et al., 2009; Stockman et al., 2008). Infusion is the model used at the authors’ institution, with education in cultural competence infused throughout the graduate curriculum in a variety of courses, a weekly clinical seminar, as well as via a diverse array of clinical placements; but with no specific requirements at the undergraduate level, except for four semesters of a foreign language. Although infusing multiculturalism throughout the curriculum appears to be a common model, little attention has been paid to assessing the effectiveness of this pedagogical approach. There have been very few reports of courses in audiology and SLP dedicated to teaching cultural competence (Horton-Ikard et al., 2009; Preis, 2008).

***Experiential learning.***

Using study abroad (SA) as an experiential learning pedagogical approach has been demonstrated to be a means through which students can develop ICC (Vande Berg et al., 2009). Cultural benefits to students have been reported in the professions of nursing (Kelleher, 2013; Philips et al., 2017); pharmacy (Steeb et al., 2020); physical therapy (Hayward & Li, 2014); and medicine (Godkin & Savageau, 2001). Across disciplines, using a variety of tools and qualitative reflections, SA students have demonstrated higher levels of respect, compassion, comfort with patients of other cultures, and increased knowledge about them (Godkin & Savageau, 2001); increases in cultural desire, awareness, knowledge, encounters, and skill (Hayward & Li, 2014); greater self-awareness, ability to connect with others, and sensitivity to other cultures, beliefs and values (reviewed in Kelleher, 2013); a shift in perspective to more positive perceptions of the other cultures (Philips et al., 2017); and increased awareness of influences of culture on healthcare and communication skills (Steeb et al., 2020). SA programs related specifically to the professions of audiology and SLP have been increasing significantly over the past few years. Of the more than 300 institutions that offer programs in audiology and SLP, 176 also offer a SA option (ASHA EdFind). This is an increase from about 26% of institutions in 2017 (Krishnan et al., 2017) to more than 75% of institutions currently offering SA (2020). However, literature regarding such programs, particularly program outcomes is limited. A few publications have included descriptive reports of specific international programs (Crowley & Baigorri, 2011, 2012; McBride & Belus, 2014; Williams et al., 2013;). Only four studies focused on cultural learning outcomes subsequent to SA were found in the literature. A one-week program to Nicaragua was shown to increase student cultural competence using the unpublished Cultural Awareness and Competence Scales developed by the author (de Diego-Lázaro, 2018). Using a self-developed questionnaire, students were shown to have a more open mindset after a short-term SA (Hofstedt et al., 2019). Only two studies have used published validated scales to demonstrate increases in cultural competence. Using the Public Affairs Scale (Levesque-Bristol & Cornelius-White, 2012), participant cultural competence was shown to increase subsequent to a two-week intensive service-learning program to Zambia called *SLHS in Zambia* (Krishnan et al., 2016). The same program to Zambia also demonstrated increases in participant cultural competence when intentional intercultural learning (ICL) exercises were included (Krishnan, Masters, Holgate et al., 2017) and by using a tool more specifically developed to measure ICC: the Intercultural Development Inventory (IDI®; Hammer et al., 2003).

Building on the previous work in Zambia, the *SLHS in India* SA program was developed in 2017, with the program occurring in the summers of 2018 and 2019. This program to a new destination country utilized a mixed methods approach including quantitative data using a valid questionnaire (the IDI®), with supporting qualitative data from reflections obtained at two time points: pre-departure and at the conclusion of the program. The primary aims of this study were: 1) to assess whether the *SLHS in India* program was effective in increasing participant ICC using the IDI®; and 2) to assess whether qualitative data substantiated and added complementary information to the quantitative measures. We hypothesized that participant scores on the IDI® would increase at the conclusion of the new program to India, and that qualitative data would support the quantitative IDI® scores.

## Methods

Approval for this project was obtained from the university Institutional Review Board (IRB). All participant records were de-identified prior to data analysis and the SA program leader (first author) partnered with researchers from the Center for Instructional Excellence (CIE; second and third authors) who had no background in speech and hearing to analyze the data and interpret results.

### Participants.

#### *Intervention group.*

Twenty-one female students majoring in Speech, Language, and Hearing Sciences (SLHS) participated in the program over two years: nine in 2018 and twelve in 2019. As is typical, there were few male students in the major, and no male students applied to the program. The participants included 16 undergraduate students and five graduate students enrolled in the Doctor of Audiology (AuD) program. There were three freshmen, three sophomores, nine juniors, and one senior. The mean age of the participants was 21.2 years (range 19-24 years). Seventeen of the participants were white, three were African American, and one was multiracial.

#### *Control group.*

The initial recruitment of control group participants was restricted to students majoring in SLHS in an attempt to match the undergraduate and graduate student participants in the intervention group. However, when sufficient number of participants were not obtained, recruitment was opened to students from other majors, most of whom were enrolled in a course in SLHS. Participants were included in the control group only if they had never travelled abroad. Nineteen students (one male) comprised the control group of participants and included 17 undergraduate students and two graduate students (one master's student in SLP, and one AuD student). There were seven freshmen, eight sophomores, one junior, and one senior, and 15 of the undergraduate participants were SLHS majors. The mean age of the participants was 19.6 years (range 18-24 years). Eighteen of the participants were white, and one was South Asian.

### Outcome Measures.

Table 1 displays the quantitative and qualitative data that were collected from each group of participants.

**Table 1**

#### *Outcome measures obtained from each group of participants*

Outcome Measure	Control group	Intervention group
Pre-IDI®	X	X
IDP® reflection paper		X
Final reflection paper or video		X
Post-IDI®	X	X

*Note.* IDI® = Intercultural Development Inventory; IDP® = Intercultural Development Plan

***Intercultural Development Inventory (IDI®).***

The last author was a qualified administrator of the IDI® and administered the pre- and post-inventory online to all participants in both groups. The IDI® was selected because (a) it was based on a theoretical framework, and had strong content and construct validity and reliability across diverse cultural groups (Hammer et al., 2003; Paige et al., 2003; Hammer, 2011); (b) it measured an individual's mindset and skillset along a developmental continuum rather than measuring individual, discrete cognitive, affective or behavioral concepts; and (c) it allowed for direct comparison with IDI® scores previously obtained from participants who traveled to Zambia. The IDI® is a 50-item questionnaire that uses a five-point, Likert-type scale ranging from disagree (1) to agree (5). It is based on the developmental model of intercultural sensitivity (Bennett, 1986; Hammer et al., 2003), later modified as the Intercultural Development Continuum (IDC®: Hammer, 2011) used in the present version of the IDI®. The developmental approach to ICC describes intercultural development along a continuum from an ethnocentric (monocultural) to an ethnorelative (intercultural) orientation towards cultural differences and commonalities. The IDI® generated two scores which represented an individual's orientation or mindset towards cultural differences and commonalities: the perceived orientation (PO) score, which represented where the individuals placed themselves along the continuum; and the developmental orientation (DO) score, which represented the individual's primary orientation as assessed by the IDI®. Five primary developmental orientations or mindsets have been identified along the continuum based on the DO scores: (a) individuals in the denial orientation (DO = 55-70) may not notice, and avoid or withdraw from cultural differences; (b) individuals in the polarization orientation (DO = 71-85) have a judgmental approach and view cultural differences in terms of "us" and "them"; (c) individuals in minimization (DO = 86-115) are in a transitional phase between the ethnocentric (denial and polarization) and ethnorelative (acceptance and adaptation) orientations, and focus on cultural similarities which may mask deeper recognition of cultural differences; (d) individuals in the acceptance orientation (DO = 116-130) recognize and appreciate cultural differences and commonalities; and (e) those in adaptation (DO = 131-145) can shift cultural perspective and change behaviors in culturally sensitive ways (The Intercultural Development Inventory, 2019). Individual and group profile reports of the PO and DO scores were generated for participants in the intervention group only. The group profile report was shared with intervention group participants via a group debrief in class. Additionally, each intervention group participant received their individual profile report and Intercultural Development Plan (IDP®) via an individual meeting with the qualified IDI® administrator (last author). The IDP® provided suggestions for specific activities to develop ICC based on each individual's developmental orientation. Control group participants completed the pre- and post-IDI®, but received no feedback regarding their DO scores.

***Reflection papers.***

Reflection is a critical component of intercultural learning, and intervention group participants were required to write a paper reflecting on what new information was most meaningful to them after completing their pre-departure intercultural learning activities, and how the new information might change their perceptions, interpretations, judgments, reactions and/or behaviors in the future. Participants were encouraged to reflect on their experiences using the Describe-Interpret-Evaluate (D.I.E.) model (Bennett et al., 1977) to raise their awareness of cultural learning strategies. Intervention group participants also wrote a final reflection paper upon conclusion of the program. In 2019, they had the option of submitting a 3-5-minute video instead of a final paper.

## **Program Components.**

### ***SLHS in India Program Description.***

*SLHS in India* is a short-term SA program designed and developed in 2017 in collaboration with an educational institution and several non-profit organizations in India and led by two faculty members from Purdue University. The goals of the program were two-fold: for participants to increase their ICC, and to gain clinical and professional skills. Specifically, anticipated participant learning outcomes related to ICC were quantitative DO score increases along the intercultural development continuum and qualitative reflections using the framework of the AAC&U VALUE Rubric suggesting development of (a) awareness of their own cultural biases as well as others' cultural beliefs; (b) communication skills with diverse others; and (c) curiosity and openness to cultural differences while reserving judgment. Anticipated participant learning outcomes related to clinical and professional skills included development of the ability to (a) interact with diverse others in a clinical environment; (b) work together cohesively as a clinical team; (c) perform hearing screenings using pure tone and otoacoustic emission (OAE) screening techniques; (d) think critically to make clinical decisions; and (e) understand topical information sufficiently in order to make formal presentations on clinical topics in a manner understandable to other professionals such as teachers and social workers. The SA program included four components:

- Spring semester: 3-4 one-hour class sessions
- Summer semester: Daily intensive three-hour pre-departure classes for two weeks
- Summer semester: Three weeks of program activities in India in collaboration with multiple community partner organizations including cultural events, nightly debriefings, and journal entries
- Summer semester: Final debriefing meeting upon return from India

The first component during the spring semester focused on the team getting to know each other, basic orientation to the program, and completion of required forms. Participants also completed the pre-program assessment of ICC using the IDI®, had their individual debriefs regarding their scores, and received their IDP®. During this time, each participant was paired with a student studying speech and hearing in India and began corresponding with their partner (buddy). Each class session also included an intercultural learning activity (e.g. video, lecture, game, discussion).

The second component included intensive daily classes at the beginning of the summer semester prior to departure to India. The goals of this component were (a) to gain knowledge about India; (b) to incorporate daily intentional ICL activities; and (c) to learn and practice clinical skills and training presentations to be disseminated while in India. To gain knowledge about India, participants were assigned topics such as the history, geography, economy, government, education system, languages, and culture of India, and presented in class on their assigned topics. Topics also included health care issues likely to be encountered in India such as HIV/AIDS and malaria. The ICL activities included watching several TED talks followed by discussions of cultural norms and differences in India such as arranged marriage, child marriage, and poverty, as well as learning and practicing some of the local language. The clinical skills training was focused on teaching undergraduate students how to perform otoscopy and hearing screenings using an audiometer as well as OAE screeners. Training presentation topics varied and were selected based on discussions with staff at the community partner organizations in India.

The third component of the program took place in India where participants followed a daily schedule of planned activities. The program activities started with one week of clinical observations with their student buddies at the National Institute of Speech and Hearing (NISH) in Trivandrum, India. Clinical observations during the week included various departments ranging from audiology diagnostics, hearing aids, and cochlear implants to cerebral palsy, autism, and early intervention. The week also included a joint clinic day during which participants and their buddies worked together as a team to provide hearing screenings. The remainder of the program was in a different city and included daily scheduled activities in collaboration with various non-profit organizations as well as a number of cultural outings throughout the program. Throughout the three weeks in India, participants had a nightly debriefing regarding the day's activities facilitated by the first author and wrote daily reflection journals regarding their cultural learning. The fourth and final component of the program was a group debriefing after return from India when participants reflected on their experiences throughout the program, and the program leaders facilitated the discussion. This component was canceled in 2019 due to participant illnesses.

### ***Intercultural learning (ICL) activities.***

The purpose of the ICL activities was to have participants in the intervention group intentionally engage in diverse activities and reflect on their learning. Each participant in the intervention group was required to select and complete three activities from their IDP® prior to departure and were free to choose from the variety of suggested activities. Activities were not standardized across participants because activities suggested in the IDP® vary depending on the developmental orientation of the participant and are geared toward moving the participant along the developmental continuum towards the next developmental orientation. In 2019, participants were encouraged to attend in-person activities and events over reading books or articles if possible. Thus, all participants in 2019 attended either two or three events compared to only three participants in 2018 who attended events. Events attended were organized by various cultural centers across campus such as the Black Cultural Center, LGBTQ Center, Latino Cultural Center, Vietnam Student's Association, Women of Color in Healthcare Association, and the local Civic Theater. Two participants visited museums (one in 2018 and one in 2019). Table 2 displays the ICL activities completed by participants in the intervention group. In addition to these activities outside class, Table 2 also displays the in-class ICL activities that were incorporated during every class session in the spring and summer semester prior to departure.

**Table 2**

*ICL activities completed by intervention group participants in and outside of class prior to departure*

<b>IDP® activities (each participant required to complete 3 activities)</b>	<b>2018 (n=9)</b>	<b>2019 (n=12)</b>
Speak with someone from another culture	6	8
Attend a cultural event	4	26
Read newspaper articles	3	1
Read a book	4	0
Watch a documentary	1	1
Reflect on a cultural topic	7	0
Observe while travelling abroad	1	0
Travel journal	1	0
<b>Intentional ICL activities in Class</b>		
Communication with Indian student "buddy"	x	x
Class lecture/discussion (self-awareness, reflecting using "DIE", self-assessment checklist, cultural iceberg)	x	x
Book discussion: <i>A Life Less Ordinary</i> by Baby Halder	x	x
Book discussion: <i>The Milk Lady of Bangalore</i> by Shoba Narayan	--	x
Cultural topic TED talks and/or discussions: arranged marriage, child marriage, poverty, caste system, religion	x	x
Guest lecture on Visitor Harassment	x	x
Culture based games	1 game	2 games
Field trips (local Indian restaurant and Hindu temple)	x	x
TED Talk: The Danger of a Single Story	x	x

*Note.* -- denotes that the activity did not occur that year

All program activities while in India related to ICL and clinical learning; Table 3 displays the general schedule of activities while in India for each year of the program.

**Table 3*****Program activities in India during each year of the program***

<b>Organization</b>	<b>Activity</b>	<b>2018</b>	<b>2019</b>
National Institute of Speech and Hearing (NISH)	Orientation/teaming with partners	x	x
	Clinical observations	x	x
	Hearing screenings	Rural clinic (n=~40)	School (n=~80)
	Cultural program	Attended	Participated
	Presentation on U.S. culture	--	x
Organization for the Development of People (ODP)	Accommodations	x	x
	Orientation	x	x
	Field trip to village	x	x
	Hearing screenings and visit at orphanage	n=27	n=20
	Presentation to staff	Language Development	Disabilities
Audiology India	Hearing screening outreach camp	n=~42	n=80
	School hearing screening	n=135 (1 school)	n=692 (3 schools)
	Presentation to preschool teachers	--	Language Development
Mysore Spastic Society (Sneha Kiran)	Visit to center for children with cerebral palsy	x	x
Divya Jyothi	Hearing screenings for youth with visual impairments	--	n=34

*Note.* -- indicates that the activity did not occur that year

Control group participants who had never travelled abroad did not receive an IDP® or complete any specified ICL activities and did not participate in the *SLHS in India* program. The two graduate students in the control group continued their clinical program as usual, with exposure to patients and clinical courses that may have addressed cultural differences. The 18 undergraduate students in the control group did not receive any specific instruction on cultural differences as is typical in the undergraduate program.

**Data analysis.**

The Statistical Package for Social Sciences (SPSS) 26 was used to conduct the quantitative analysis. A Paired-samples *t*-test was used to examine whether there was a statistically significant change in the intervention group participants' pre- and post-DO scores for each year of the SA program. Both intervention groups were combined, and an Independent samples *t*-test was used to compare whether there was a statistically significant difference between participants in the intervention group and the control group who did not go abroad. Changes in ICC were calculated as the difference between pre- and post-DO score for each student, and an Independent Samples *t*-test was used to compare the score changes for both groups of participants. Data cleaning procedures suggested by Tabachnick & Fidell, (2007) were used to check for outliers and assumptions for normality and homogeneity of variance. The data were normally distributed and assumptions for conducting the analyses were met. Cohen's *d* was also calculated as a measure of the effect size to compare changes in pre- to post-DO scores as well as between the intervention and control groups. A value less than .20 suggests a small effect, .50 medium effect and .80 large effect (Cohen, 1977).

The qualitative data were analyzed by the first and second author in a multiphase process. The analysis focused on evaluating (a) the structure and implementation of the program: participant descriptions about the program that either facilitated or hindered participants in meeting learning outcomes and (b) program learning outcomes: participant descriptions of development of intercultural knowledge and competence, as well as clinical knowledge and skills. A combination of open and axial coding, inductive coding as well as constant comparison was used (DeCuir-Gunby et al., 2011; Glaser & Strauss, 1967; Patton, 2002) across different phases of the data analysis process to develop the thematic structure presented in Table 5. Memos and reflections were used to guide discussions and document developing codes and subsequently themes through the different phases. In the first phase, the authors randomly selected and independently coded two pre-departure reflections and two final reflections, one from each year. Open and axial coding were used in this phase to identify patterns and themes across the data. The first and second author met and discussed the patterns and codes across the data, as well as how and why each specific code was assigned. Through this discussion a codebook was developed with initial definitions assigned to each code informed by assessment frameworks on intercultural knowledge and competence development (Association for American Colleges & Universities [AAC&U], 2009; Dearthoff, 2006). The AAC&U intercultural knowledge and competence VALUE rubric was used as a means to provide the language for defining and describing codes related to intercultural development that emerged during analysis. In this way the authors were able to connect student reflections with the literature on intercultural knowledge and competence development. The codes were derived primarily from the student responses as patterns emerged through the coding process, and later connected to the frameworks described in the literature to provide clarity on definitions. This approach was adopted in order to ensure priority was given to student voices and experiences.

In the second phase, both researchers used the codebook to independently code two additional reflections (one pre-departure and one final reflection). After completing this second round of coding, the first and second author met and discussed each quotation with respect to the specific code. Similar quotations placed under the same code were counted as agreed upon, and where quotations were assigned to different categories consensus or intercoder agreement was achieved through discussion. In this second phase the definitions were refined, and codes were merged as

needed. After finalizing the codebook, the entire data set was coded using the codebook. The first and second author met periodically to discuss the quotations and coding process and develop consensus where disagreements emerged. Consensus or inter-coder agreement was achieved through dialogue, referencing the definitions drawn from literature which were used to define themes and revisiting previous iterations of coding to justify assigning a code to a specific theme or subtheme. Through this iterative process, trustworthiness was established in the qualitative data analysis process while not oversimplifying the data and subsequent findings (Campbell et al., 2013; Clavarino et al., 1995; Koro-Ljungberg, 2010); and connections were drawn between participants' experiences described in the data and conceptualizations of intercultural knowledge and competence development in the literature (AAC&U, 2009; Deardorff, 2006).

## Results

### Quantitative.

Table 4 displays the descriptive statistics for the two groups of participants prior to and at the conclusion of the SA program.

**Table 4**

*Descriptive statistics for the control and intervention groups by year and combined*

Group	N	Pre-test		Post-test	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Intervention: 2018	9	92.44	13.46	105.67*	15.76
Intervention: 2019	12	91.08	12.77	104.92*	15.38
Intervention: All	21	91.67	12.76	105.24**	15.15
Control	19	87.6	12.82	89.25	15.61

*Note.* \* = pre-post difference  $p < .05$ ; \*\* = control-intervention group post-test difference  $p < .005$

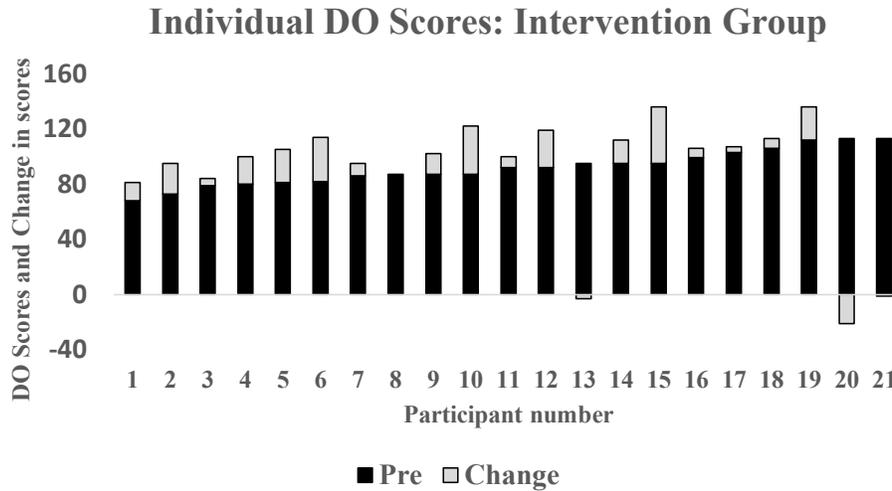
There was no significant change in DO score for the control group participants, and an increase in score for intervention group participants (each year and combined) at the conclusion of the SA program. The results of the paired-samples *t*-tests revealed that there was a statistically significant change in ICC based on the pre- ( $M = 92.44$ ,  $SD = 13.46$ ) and post-DO score ( $M = 105.67$ ,  $SD = 15.76$ ;  $t(8) = -2.85$ ,  $p = .021$   $d = .95$ ) for the 2018 intervention group, and pre- ( $M = 91.08$ ,  $SD = 12.77$ ) and post-DO score ( $M = 104.92$ ,  $SD = 15.38$ ;  $t(11) = -3.06$ ,  $p = .011$   $d = .88$ ) for the 2019 intervention group.

Due to the very similar pre- and post- group mean scores in 2018 and 2019, the two groups were combined for comparison with the control group. An independent samples *t*-test was used to compare the pre- and post-DO scores for the two groups. There was no significant difference between the pre-DO score of the intervention group ( $M = 91.67$ ,  $SD = 12.76$ ) and the control group ( $M = 87.6$ ,  $SD = 12.82$ ;  $t(39) = 1.01$ ,  $p = .31$ ). However, there was a significant difference between the post-DO score of the intervention group ( $M = 105.24$ ,  $SD = 15.15$ ) and the control group ( $M = 89.25$ ,  $SD = 15.61$ ;  $t(39) = 3.33$ ,  $p = .002$ ,  $d = .90$ ). A statistically significant difference in ICC based on pre- to post- change in DO score was also observed. Results of the independent samples

*t*-test revealed that intervention group participants on average reported greater gains in ICC ( $M = 13.57, SD = 14.56$ ) compared to control group participants ( $M = 1.63, SD = 12.14; t(38) = 2.79, p = .008, d = .89$ ). Figures 1 and Figure 2 show pre- and post- change in DO scores for each participant in the intervention group and control group respectively.

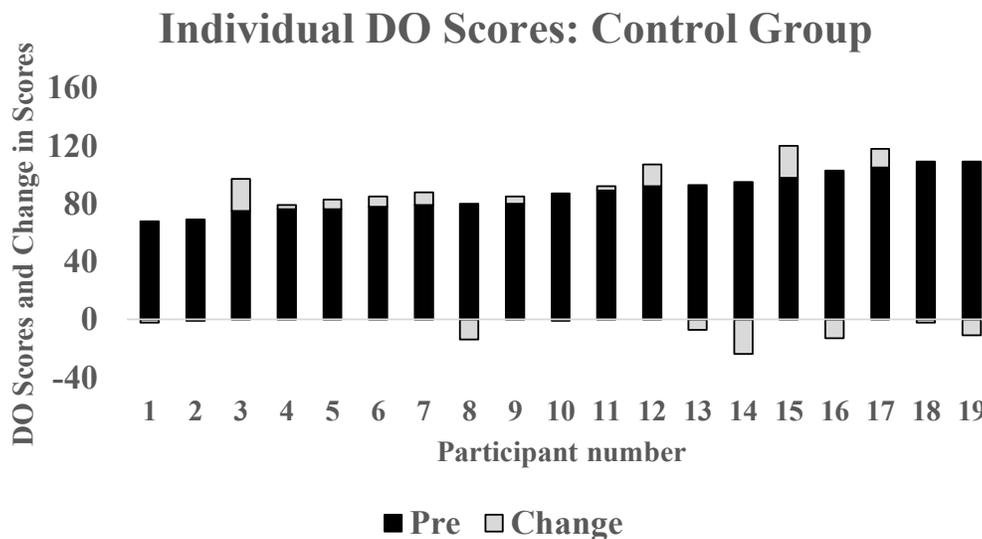
**Figure 1**

*Pre-DO score and change in DO score for each participant in the intervention group*



**Figure 2**

*Pre-DO score and change in DO score for each participant in the control group*

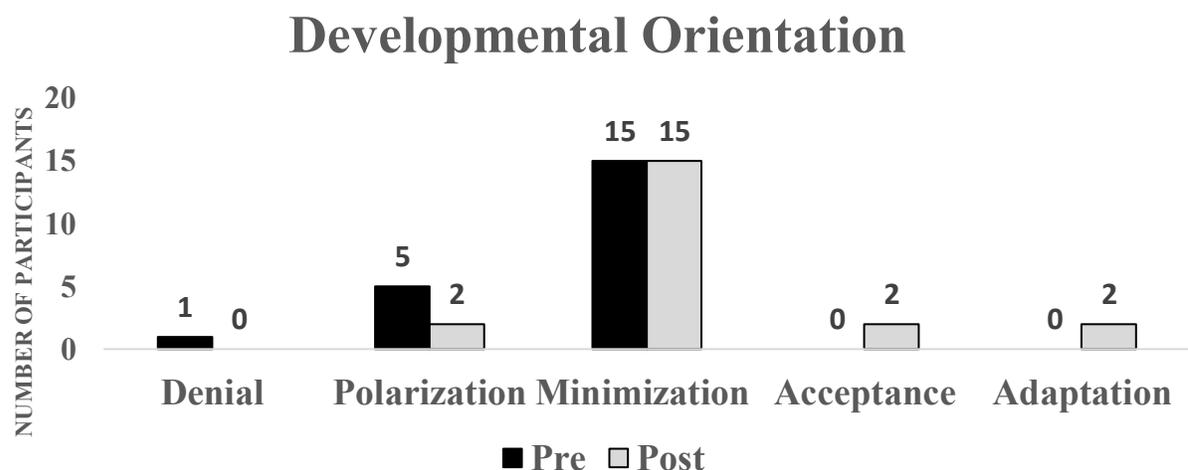


Despite the significant increase in the group mean DO score post-program for the intervention group, not every participant had a score increase. The majority of the participants (17 of 21 or 81%) demonstrated an increase in their DO score, one participant (#8) had no change in score, two participants had a slight decrease in score of 1-3 points (#13 and 21), and one participant had a substantial decrease in score of 21 points (#20).

Figure 3 displays the developmental orientation mindsets of the participants prior to and at the conclusion of the program. Nine of the 21 participants (42.9%) had score increases that moved them into the next orientation along the developmental continuum. A shift in developmental orientation indicates a change in perspective and behaviors when dealing with diversity. One participant moved from the Denial orientation (avoiding, ignoring or missing cultural differences) to Polarization (noticing and judging cultural differences), four of the five participants who were in the Polarization orientation (viewing differences in terms of “us and ‘them’”) moved to Minimization (looking for commonalities, deemphasizing differences), two of the participants moved from the Minimization orientation to Acceptance (appreciating and deeply comprehending cultural differences), and two more from Minimization to Adaptation (changing behaviors in culturally sensitive ways, bridging across differences). These changes in participants’ orientations/mindsets towards cultural differences and commonalities as measured by the IDI® reveal that individual participants experienced the program differently, which led them to think about diversity differently than they had previously. Furthermore, the results reveal that the majority of participants were moving towards more complex understanding of cultural differences. The qualitative data presented in the subsequent sections provide further insights into participant experiences that contributed to changes in their intercultural orientations/mindsets.

**Figure 3**

*Pre- and post-program developmental orientation for each participant in the intervention group*



**Qualitative.**

Each participant wrote a pre-departure reflection paper after completion of their IDP® activities before departure to India, and a second reflection paper or video at the conclusion of the program. We describe and present the results based on themes across two categories (a) program structure and organization and (b) development of intercultural knowledge and competence. The first category is organized around themes that include reflections and comments identifying aspects of the program that were beneficial or needed improvement, and reflections on the impact of the program in participants' personal and professional lives. The second category is organized around themes and sub-themes that highlight components of intercultural attitudes, skills and knowledge identified in the intercultural knowledge & competence VALUE Rubric (AAC&U, 2009) competencies associated with effective and appropriate intercultural communication in general as well as in clinical practice. Table 5 displays the thematic structure that resulted from the qualitative data analysis.

**Table 5**

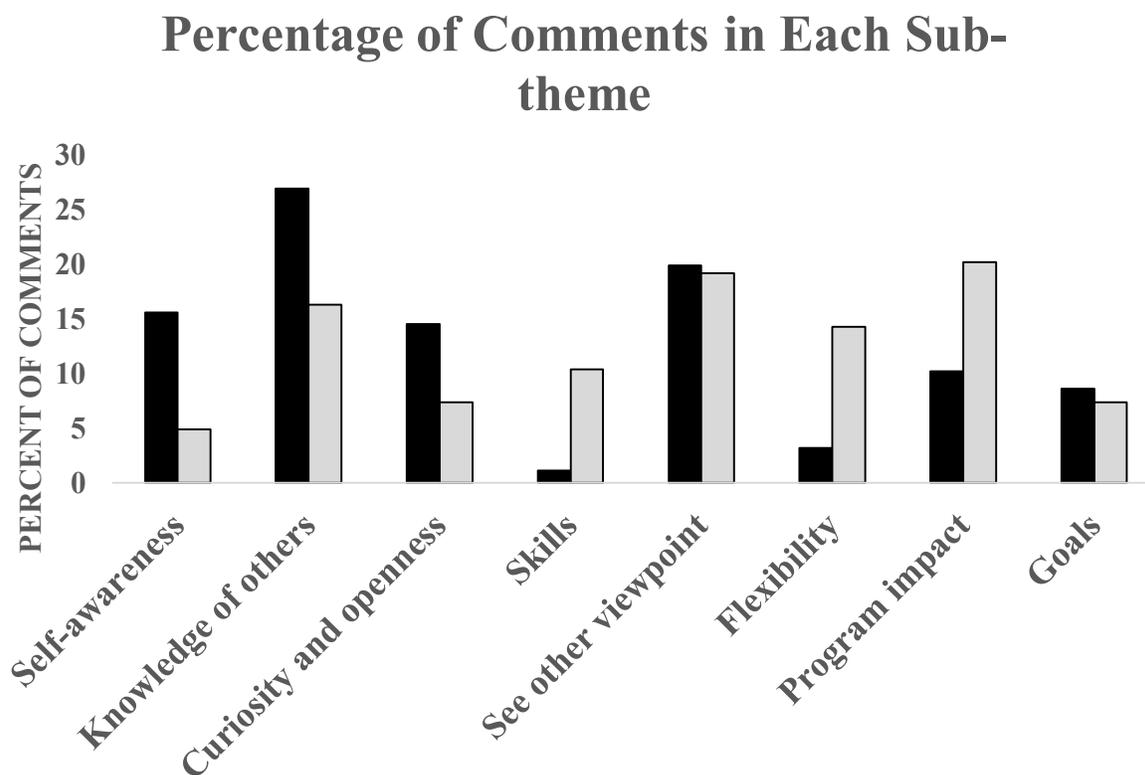
*Thematic structure including major themes and sub-themes that resulted from the qualitative data analysis*

<b>Category 1: Program Impact/Outcomes</b>	
<b>Program impact</b>	<b>Cultural goals</b>
Comments regarding overall experiences identifying aspects of the program that were beneficial or needed improvement	Goals explicitly or implicitly communicated about aspects of intercultural competence participants would like to develop or continue to develop
<b>Category 2: Intercultural Knowledge and Competence</b>	
<b>Theme 1: Expanding worldview (Knowledge)</b>	
<b>Self-awareness</b>	<b>Knowledge of others</b>
Comments recognizing and reflecting on one's own perspective and how it may inform decisions in different situations	Reflections on differences and similarities in worldviews and understanding of differences in actions and decisions in a given situation
<b>Theme 2: Attitudes and Skills</b>	
<b>Curiosity/openness</b>	<b>Skills</b>
Comments demonstrating interest and desire to seek out and evaluate cultural information; being open towards cultural differences	Descriptions of skill development such as diverse means of communication, interacting with patients, and clinical skills
<b>Theme 3: Flexibility</b>	
<b>Ability to see other's viewpoint</b>	<b>Flexibility towards differences and emotional reactions</b>
Reflections on different perspectives in a given situation; understanding that cultural differences impact perspectives	Reflections about dealing with complex situations where the best course of action is unclear; regulating negative feelings that arise from intercultural situations

Overall, 186 items were coded from the pre-departure reflections and 203 items from the final reflections. Although similar themes were observed in both data sets, the distribution of comments was different in the pre-departure reflections, compared to the final reflections. The pre-departure reflections focused more on expanding worldview, with 42.5% of comments in this theme, and 15-23% in each of the other themes, while the final reflections included a third of the comments in flexibility followed by program impact (27.6%), and 17-21% in the other themes. Figure 4 displays the percentage of comments coded in each sub-theme from the two data sets. In regards, to sub-themes, pre-departure reflections were focused more on increased knowledge of others (26.9%), followed by the ability to see other viewpoints (19.9%), as well as self-awareness (15.6%) and curiosity and openness (14.5%). Final reflections focused more on program impact (20.2%) followed by the ability to see other viewpoints (19.2%), as well as knowledge of others (16.3%) and flexibility towards differences and emotional reactions (14.3%). Notably, there were only two comments (1.1%) regarding skills in the pre-departure reflections but skills reflected 10.4% of the comments in the final reflections. Given the differences in the distribution of comments across the pre-departure and final reflections, the results that follow are presented separately, first for the pre-departure reflections and then the final reflections. Quotations from both data sets (pre-departure and final) will be presented to support each theme, and the participant associated with each quotation is identified using a pseudonym.

**Figure 4**

*Distribution of comments across each sub-theme in the pre-departure and final reflections*



***Pre-departure reflections.***

**Category 1: Impact/Outcomes.** Overall, 18.8% of pre-departure reflection comments were classified within this category which included the two sub-themes of program impact and cultural goals.

*Program Impact.* This sub-theme included 10.2% of pre-departure comments that summarized participants' overall program experience and identified specific aspects of the program that were beneficial. There were several general positive comments such as the following by Harriet, "Ultimately, I felt like these [IDP®] activities were very thought-provoking and made me more aware of myself." Additionally, participants commented on having a better understanding of inclusion and embracing differences. For example, Della stated the following:

... journaling and class helped me realize that although I come from a family with a mix of different cultures, I never really have educated myself about these cultures ... being passive about different cultures is not the same thing as being culturally inclusive.

Rita had a similar sentiment stating:

These activities changed my old beliefs and habits of keeping to myself in an effort to not be intrusive or rude. Instead, I will work on being curious and asking questions when I don't know, apologizing when I make a mistake (and moving on without dwelling on it), and using my new knowledge to celebrate others' differences.

*Cultural goals.* Comments in this sub-theme (8.6%) included goals about aspects of ICC that participants wanted to continue to develop, as well as action as a result of events or activities that they participated in. Some participants, such as Betty, expressed simple, overarching goals such as "In the future, I plan to continue to seek to understand others with an open heart and mind." Cate acknowledged the importance of knowing one's own biases, saying, "I think that knowing about these biases is the first step in moving toward a more global mindset." Janice expanded on this saying:

These activities forced me to sit with my discomfort, explore how I have benefitted as a white person, and think about how I can be a better ally for minority populations. I can no longer avoid these issues, and I must put conscious effort into learning more about other cultures so that I can understand the differences and bridge between them. My goal for the future is to attend at least two cultural events each semester so that I can continue to develop my intercultural competence after returning from the trip. As a result of participating in these activities, I want to do more in my community to support people from other cultures, and I will continue to evaluate my initial reactions to cultural differences and put effort into understanding them before making judgements.

Kitty acknowledged the importance of reflection with her comment "... it [reflecting] helped me the most in understanding cultural patterns of differences and commonalities. I believe by doing this I will be able to achieve my goal of further advancing along the IDI spectrum ...." Some participants spoke specifically about being inspired into action with comments such as "It is my responsibility to listen to people from minority cultures and help their voices be heard." (Janice).

Overall, comments regarding impact and outcomes indicated that participants appreciated the pre-departure activities and experienced personal growth by increasing their self-awareness and awareness of differences. The activities also helped them set cultural goals for themselves.

**Category 2: Theme 1: Expanding worldview.** Overall, 42.5% of pre-departure reflections, were categorized in this theme, within the two sub-themes of self-awareness and knowledge of others.

*Self-awareness.* This sub-theme included comments (15.6%) that recognized and reflected on participants' own perspectives and how these may inform their understanding of others and their decisions in different situations. Many participants acknowledged that perhaps they were not as open-minded as they had thought and recognized the importance of knowing their own biases in order to understand others. There were several comments similar to this one by Kitty who stated: "I found it helpful to gain insight on my own cultural values and attitudes, so I can be aware of how I act towards others. Being aware of my own actions will help me transition and adapt to other cultures' norms."

Other participants, such as Rose, reflected more deeply about this with comments such as:

Looking 'below the iceberg' when doing these cultural activities has forced me to do a lot of soul searching about myself than I would have previously expected. I have learned you cannot look deeply into someone else's culture without looking at your own. Overall, I have learned that culture is not necessarily what surrounds someone, but it a part of an individual's identity. Culture is embedded into the core of a person, because many of their beliefs, thoughts, and actions can be centered around the culture they were raised in.

Della explained it a little differently stating:

I almost feel as if I was raised to notice the different cultures, but not raised to fully embrace them. This means that I acknowledged that people had different ethnicities and ways of being raised, but I wasn't really encouraged to learn about them or understand them. We were taught to just mind our own business and not judge others. Growing up, this meant a lot of ignorance about other cultures.

Harriet commented about the ease of thinking you are inclusive while being in the dominant culture:

I thought that just because I attended a diverse campus that automatically made me inclusive, but I really haven't been .... It is easy for me to just act in my own cultural way and have others adapt because I'm from the dominant culture. It is almost an expectation that nondominant cultures are expected to conform in the U.S. I think this has really contributed to my minimization orientation.

Several participants also recognized their privilege, such as this statement from Rose:

I am a straight, white woman, and honestly have never had to experience discrimination because of my skin. I have an amount of privilege I was not previously aware of. I can't imagine walking into a store and being followed, or out taking a walk in my neighborhood and being stopped by a police officer. I will never have to live knowing my ancestors were prosecuted because of the color of their skin. These women have

experienced true pain at the hands of white people, and I can't help but feel somewhat responsible.

*Knowledge of others.* This sub-theme included reflections on knowledge acquired regarding differing worldviews, differences and similarities between cultures, and factors that play a role in decisions and behaviors. Of all pre-departure reflections, this sub-theme had the maximum number (26.9%) of comments. Harriet realized that it is impossible to “master” every culture, stating:

The book started off by reminding the reader that you don't have to be a walking encyclopedia to be culturally sensitive and curious. I felt like this was an important first step for me. At first, I felt very overwhelmed with the idea of all these cultural activities, and I felt like I would never be able to ‘master’ it. The book also taught me to remember that people are a combination of different backgrounds and cultures. Every person's culture can be different. I certainly cannot generalize all the things I've learned.

Most of the pre-departure comments in this sub-theme related specifically to events or activities completed by the participants. Kim started off saying, “... I realized ‘culture’ is not always limited to ethnicity, religion, or nationality...I learned that they use events such as drag shows to celebrate the culture of their social group and also support its members.”

After attending a dance performance at the Black Cultural Center, Rose commented: “... dance is more of a way of life; Africans use dance to communicate, for celebrations, and to relay their history to younger generations ... I saw this portrayed in the Johari dancers because their pieces are deep in their culture.” Dora who attended an event called *African Prints in Conversation* learned the significance of textiles in African culture stating, “She [the artist] noted how textiles represent many different areas of a woman's life. These textiles provide the women of Ghana economic support, a feeling of pride for their culture and gives them a way to find their own voice.”

Several participants also chose to speak to someone from a different culture as one of their IDP® activities, and there were many comments about what they learned from these conversations. Janice, who spoke to her Latina friend from grade school, stated, “... what struck me most from the conversation were the everyday aggressions she has had to deal with.” Other participants spoke to friends/peers from India to learn more about differences in the culture they were preparing to venture into. Through these conversations, participants learned about public displays of affection: “He shared that the main difference that he experienced was body language/physical affection. In India he once got in trouble for hugging a girl at school but here people are much more physical and expressive with their bodies” (Hallie); appropriate topics for conversation: “...most personal topics are viewed as fair game in India such as money, politics, attire, family life, and marriage. I found this fascinating to learn” (Kitty); arranged marriage: “I learned that star signs, social class, and same religion were things that were important to her parents to look for in a man. She currently has a boyfriend in the United States and she shared that it puts a strain on her relationship with her parents” (Betty); and distinctions between personal and professional life:

In the US, for the most part, people tend to keep their personal lives separate from their professional life. Specifically, Americans do not always talk about personal things with

coworkers, like money, unless they are close friends. On the other hand, in India she felt that her coworkers end up becoming her friends and there is less separation from her work life and her personal life, because it ends up blending together. People here tend to shy away from questions about weight and money, but in India those questions are not uncommon (Mary).

Overall, the reflections in the expanding worldview theme suggest that participants increased and realized the importance of self-awareness of their own biases, attitudes and values, and increased their knowledge of different others.

**Category 2: Theme 2: Attitudes and Skills.** Overall, 15.6% of pre-departure comments were in this major theme with almost all comments in the sub-theme of Curiosity and Openness (14.5%). Skills were mentioned by only one participant whose pre-departure activities included travel to another country.

*Curiosity and openness.* This sub-theme included comments (14.5%) demonstrating an interest and desire to seek out and evaluate cultural information about one's own and others' perspectives, as well as being open, flexible, and understanding towards cultural differences. Many participants reflected on listening, being more curious, asking questions, and having discussions with different others to learn more, such as, "I learned that it is so important to listen intently and ask questions. It's also important to spend time with others in their area of comfort, rather than your own. You learn a lot more about them that way" (Amanda); and, "These activities made me more curious to find out more about these groups .... I realized I should be more intentional about digging deeper than just the surface level because most of the time you find out really interesting information" (Debbie).

Many participants also acknowledged that they had stepped out of their comfort zone and described feeling uncomfortable. Kim described her discomfort saying:

Although everyone was very welcoming, I found being in an unfamiliar cultural environment challenging. Not knowing much about the social norms in their community made me feel nervous about being unintentionally offensive, and I felt that I'd pushed myself a bit beyond my comfort zone. However, I realized that that is something you would experience with any foreign culture you try to immerse yourself in. And despite moments of discomfort, I had a pleasant experience overall. I learned that the most important thing was being open-minded, talking to people, and trying to understand that different cultural practices may make you uncomfortable, but they can be worth trying to understand.

Overall, comments in the attitudes and skills theme expressed that participants realized the importance of listening, asking questions, and stepping out of their comfort zone to better understand others.

**Category 2: Theme 3: Flexibility.** Overall, 23.1% of pre-departure reflections were classified within this theme, which included the sub-themes of the ability to see another viewpoint, and flexibility and emotional reactions towards differences.

*Ability to see other viewpoints.* This sub-theme included participant comments (19.9%) that demonstrated a shift in perspective or an ability to view something from a different perspective after an event or activity. Rita acknowledged that going to a cultural center was new and difficult for her stating:

I felt that if I went in one that I would be judged or ridiculed because I am not a part of that culture. I didn't want to intrude into the centers that they have for themselves. Those centers might be the only place on campus where these diversity groups can feel like they can completely be themselves around others going through cultural issues similar to their own, such as discrimination or prejudices. Therefore, I felt like it was best for me to not invade on their place. However, this was far from true. The people at the Latino Cultural Center kindly welcomed us in .... This showed me that most cultures just want others to reach out to them and be interested in all they have to offer. They know that when more people are educated about cultures different than their own, they are more likely to be open-minded and inclusive.

After attending many cultural events on campus, several 2019 participants commented on their experience of being a "minority." For example, Rose said:

When I first walked into the event, I knew I stood out from most of the other individuals who were at the reading. Most were individuals of color, or members of the LGBTQ community, both of which I do not belong to. As I felt out of place, I couldn't help but think that this is how these individuals felt every single day of their lives. I can't imagine feeling like you don't quite belong because I have never had to experience that feeling before....

Other participants had similar comments such as, "This helped me to understand how my orientation of Minimization makes people from minority cultures feel. The majority culture constantly tries to erase them and minimize their success, while simultaneously benefitting from it" (Janice).

Participants from 2018 expressed how reading about differences can change a viewpoint as well. Jasmine stated:

Reading newspapers from other countries may not always seem like something that would change the way someone views a country or their perception on the culture – but I definitely have to say that I was very set in the mindset that no other country had a newspaper and social media quite like the U.S. It was my own ignorance which brought this to light and reading the online newspaper and seeing that – India too has the same social media drama and pop culture that is here in the U.S. It's all too often that I find myself thinking that the U.S. is the only place that has this or that – and just doing these simple activities to see that other countries are just as developed in the media world as the U.S. is eye-opening to me and it changes my perception on this.

Several participants expressed sentiments specific to their ICL activities and related them to topics discussed in class. For example, after listening to a TED talk, Kassie commented:

It [arranged marriage] now makes sense to me given the importance and structure of family in India. Building a marriage on shared family values, religion, and culture is important in

most cultures, and I think that that type of marriage can occur in different ways with the consent of all parties involved.

*Flexibility towards differences and emotional reactions.* This sub-theme included only 3.2% of pre-departure comments, and often interweaved expressions of flexibility and emotional reactions.

Participant pre-departure reflections that described emotional reactions focused on activities that affected them such as the discomfort of being in the minority: “When I first entered the room, I was the only white (Caucasian) person. This was scary and unusual for me – I was uncomfortable” (Colleen); the guilt of being part of the privileged majority: “While participating in all the activities, I felt guilty about being part of the majority that, as a whole, discriminates against and oppresses people from different backgrounds” (Janice); and empathy: “When we learned about the menstruation taboo in India, my heart broke for all the women and girls who had to experience shame because of a bodily function they have no control over” (Rose).

Overall, reflections in the flexibility theme suggest that after completing the activities, participants were better able to see things from a different perspective, and started to indicate an increased flexibility towards differences, and also expressed their emotional reactions to unfamiliar events and encounters.

Taken together, the pre-departure reflections highlight the fact that the different activities helped participants (a) grapple with how their own lived experiences had informed their worldview, while at the same time understanding the experiences of others who are different from them, (b) develop a desire to explore cultural differences and similarities outside of the context of structured activities like the course, and (c) start developing the attitudes, skills and knowledge that would allow them to effectively and appropriately interact with their peers who would be going on the trip as well as the people in India. The final reflections described in the next section provide further insights about participants’ experiences in India captured across the different themes and sub-themes.

### ***Final reflections.***

**Category 1: Impact/Outcomes.** Overall, 27.6% of final reflection comments were classified within this theme with the sub-themes program impact (20.2%) and cultural goals (7.4%).

*Program impact.* This sub-theme included positive comments such as, “SLHS in India was an absolutely incredible experience that has not only opened my eyes to cultural differences across the globe, but also helped [me] grow as a person and future clinician” (Betty). Ruby echoed Della’s pre-departure comment at the conclusion of the program stating, “... our life or our culture isn’t better than another culture, but that it’s just different. That’s something I knew before, but it brought it into perspective, actually going and experiencing the differences.” The idea of embracing differences was echoed at the conclusion of the program with statements such as, “... studying abroad has changed me because it has reminded me in such an organic way that differences are simply differences. Differences should be cherished and shared. There is so much that I can learn from other people and other cultures” (Betty).

A common theme noted in the final reflections was the comparison of learning in a classroom to learning through the immersive experiences in India, such as this one by Cate:

... service learning trip in India taught me much more than I could have ever learned in the classroom. I realized how big of a difference there is between studying a culture and living in it with people who are a part of it.

Participants also appreciated the pre-departure preparation, saying:

After we arrived in India, I had many instances where I was so appreciative of the preparation we had before our departure. While short presentations on culture, healthcare, history, economy, etc. are obviously insufficient in developing a full understanding, our base knowledge really helped provide context for our different experiences, and I was able to build on what we had talked about through experience and observation. (Kassie)

Another aspect mentioned was personal growth with comments such as “I grew in patience, adaptability, flexibility, teamwork, critical thinking, and cultural awareness. All of these things are invaluable skills that will help become a better person and clinician” (Betty); and “I have gained tools that will allow me to bridge the barrier between cultures in both my professional and personal life” (Kitty). Della acknowledged that immersion was not always easy, stating, “... we were fully immersed in authentic culture. In doing so, we were encouraged to step out of our comfort zones. Often times, this would make for uncomfortable situations, or better phrased, learning experiences.” While Janice spoke about what she felt was the most impactful aspect of the program saying, “Talking with the buddies was the most influential part of the program for me in teaching me about cultural differences, as I could hear personal stories and ask questions one-on-one.”

*Cultural goals.* At the conclusion of the program, participants expressed the goal of continuing their intercultural growth with comments (7.4%) such as, “I really don’t want to become stagnant in all these things I worked on during this program ... my personal goal is to continue to travel more, learn more about other cultures, and incorporate these things into my personal and professional life” (Harriet). And this comment by Della, “Without a doubt, this study abroad has changed my perspective of the world, and I see this as just a seed for the change I can make in myself and internationally as well.”

Participants also expressed the desire to effect change in their families and communities with comments such as:

... my role is to educate them [conservative family members] by sharing my experiences and showing them how I treat and respect others .... I only hope that I can be the smile that changes everyone else’s perspective to be more kind and culturally accepting and aware, to make our community a better place for everyone (Colleen).

Janice summed up this sentiment with:

Before, I often felt that what I did would not have much effect, but now I have seen how just a few people can make a significant impact if they know the proper avenues by which to go about change ... they have inspired me to be a better ally, citizen of my community, and citizen of the world.

Overall, participant comments in the theme Impact and Outcomes indicated that they benefitted substantially from the program because it facilitated learning better than being in a classroom or

reading about culture, and led to personal growth and the desire to embrace differences. Participants also set additional cultural goals for themselves in order to continue their growth.

**Category 2: Theme 1: Expanding worldview.** Overall, 21.2% of the final reflections were categorized in this theme.

*Self-awareness.* Only 4.9% of final comments were in this sub-theme, compared to 15.6% of the pre-departure comments. Some comments regarding awareness of one's own biases were similar to pre-departure comments, such as Della, who stated:

Although unexpected, my time in India has taught me to be more self-aware as well. The concept of cultural humility really resonated with me. Before learning about this, I considered myself to be very self-aware with understanding where my emotions are coming from and how to empathize with others when dealing with hard situations. This study abroad has pushed me to really think about why I feel things and how my upbringing and cultural background impact my choices.

Kassie expressed having to re-evaluate her assumptions regarding others' knowledge of the U.S. saying:

I was more surprised by others' lack of knowledge about U.S. culture. I think my expectations were probably influenced by both my relatively high knowledge of Indian culture due to our preparation, as well as my perception that others may be familiar with American culture due to American media (like movies and television shows), but I was asked a few questions about the United States (namely about marriage) that surprised me. I had to rethink the ethnocentric assumption that others would know about American culture and be more patient in my explanations."

*Knowledge of others.* This sub-theme accounted for 16.3% of the final comments and covered participant learning about a variety of cultural differences and aspects such as Indian hospitality, poverty, arranged marriage, healthcare, and disabilities. Della covered several of these aspects when she said:

I learned from my buddy about her upbringing in her religion, and how she wasn't able to date the guy she liked for long because their families didn't share the same beliefs. I learned from the village that ODP transformed that although the villagers live a simple life, they value the next generation and aim to provide a good education for them. I learned that many Indian children, regardless of disability, socioeconomic status, or life troubles in general, share an untainted joy and appreciation for the simple things offered to them.

Clara shared how her assumptions were wrong stating, "I thought they [buddies] would be conservative and shy. During their school day, they were more disciplined, soft-spoken, and well-mannered, but when we had one on one time with the buddies, they were free, loud, and full of energy." Rita added:

... our NISH buddies helped to destroy my embarrassing single story of India. Before our arrival, I didn't expect much from NISH. I didn't think they would have equipment comparable to ours because my single story of India portrayed it as a developing country with less education and resources. However, NISH proved me completely wrong. They

had the same equipment as we have in our clinic and the buddies and staff were so knowledgeable. They really opened my eyes and exemplified the dangers of a single story.

Arranged marriage – a topic that has been mentioned across several themes was addressed here as well by Betty stating:

I also felt like I had the opportunity to expand my understanding of cultural aspects of India that we talked about in class .... My buddy at NISH opened up to me and shared her personal experience with being in a love relationship and her parents not approving of it. They preferred that she would wait to marry someone that they chose. My buddy explained more to me about how she honored her parents' wishes and knew they knew what was best for her. Because she shared her story, I was able to better understand the thoughts of a young person navigating relationships in a different way than I do. I appreciated her vulnerability and willingness to share her personal experiences with me. I can learn so much by reading articles, but hearing someone's personal experience sheds even more light on this specific aspect of culture.

Several participants reflected on the differences in hospitality that they encountered with comments such as this from Dora:

Everywhere we went the people were so welcoming and I could tell they were excited to have us there. During the school screenings, at NISH, the non-for-profit organizations, they were all just so friendly. Right when we would walk in, we would get served tea, coffee, or water along with some biscuits... You also cannot say no for an answer in India, which I found challenging at times. I felt like I was offending them if I said no.

Several participants also reflected on the level of poverty that they saw and got a first-hand introduction to with comments such as:

The chance to walk through the village and learn about daily life there opened my eyes to the difference of poverty in the U.S. and India. In general, people in the U.S. that live in poverty have more access to running water, electricity and secure living arrangements. Poverty in India seemed more extreme. Actually getting to see the conditions and meet with the people there truly helped me understand what people in poverty experience there. (Betty)

And, this from Cate:

Specifically, I have greatly increased my understanding of the gap between the rich and poor. Although I know that there is a significant gap in the United States, it is so much vaster in India. After going to a rural village and seeing how most of the population in the country lives, I was able to see firsthand what it meant to live in poverty for these people. I realized how resourceful and innovative they are as well, always looking for ways to improve their status and create more prosperous lives for future generations.

Another aspect that participants addressed was healthcare, such as this comment from Clara:

Hearing screenings are a basic service required in U.S. schools, but in India it is not common. Some of the kids were frightened or thought it was going to hurt, and it made me sad, if they don't have access to basic screening service, what else are they lacking?

The medical services might be cheaper than what we pay in the U.S., but Indians don't have the access to care due to the scarcity of location or the lack of education to do so.

Access for individuals with disabilities was addressed as well, particularly since the team did a presentation on Disabilities in 2019. Participants commented that:

... it really opened my eyes to the struggle that people face worldwide in different countries. I really respect those with any disabilities so much more in third world countries because health care is not readily available, transportation is difficult and there are so many barriers that are not yet broken and rights that need to be mended for those with disabilities (Colleen).

Overall, comments in the Expanding Worldview theme focused primarily on participants' increasing knowledge and deeper understanding of a variety of aspects of Indian culture and life such as arranged marriages, hospitality, and poverty.

**Category 2: Theme 2: Attitudes and Skills.** Overall, 17.8% of final reflection comments fit in this theme that included the sub-themes curiosity and openness (7.4%) and skills (10.4%).

*Curiosity and openness.* Several comments in this sub-theme were similar to the pre-departure reflections, in that participant final reflections acknowledged the importance of listening, with comments such as, "Through these experiences of learning about cultural differences, I was reminded of the importance of being open-minded and an active listener when interacting with people from diverse backgrounds" (Janice). Additionally, participants, such as Harriet, also expressed a desire to travel more to learn more about other cultures with comments such as,

This trip has also really inspired me to travel more ... to be immersed in the culture where I travel ... traveling and other cultures really intimidated me before this trip, and I think this trip was the first step for me in opening myself up.

Final reflections also discussed stepping out of one's comfort zone, "We got to get out of our comfort zone with the buddies: eating with our hands, trying the foods, having coffee breaks and taking our shoes off in clinic...it was part of the experience, so I adapted" (Clara). Kassie summed up with a positive statement saying,

[The program] helped to relax my mindset when it comes to communicating with others who are culturally different, making me less nervous to make a mistake or accidentally offend, and more curious to ask questions and take interest in others' customs and traditions.

*Skills.* This sub-theme included comments (10.4%) describing the use of diverse communication skills in different contexts with culturally different others, as well as comments related to clinical and interpersonal interaction skills. Comments regarding communication and the language barrier were common. Some of these related to conversations with participants' Indian student buddies such as "Of course, there were times where we had difficulty in communication, whether that be because of our accents or because of something like unfamiliar slang terms, but we always figured out a way to mediate the situation" (Sara).

However, many more comments regarding communication skills related to the clinical environment. Participants were challenged to be flexible, creative, and problem-solve during clinics to explain the task of performing a hearing screening as explained by Rita:

... this trip tested our resourcefulness and creativity. This was especially true when communicating with people who did not speak English .... Sometimes, communicating the task with the person required a lot of creativity because we only knew a very limited amount of Kannada. We utilized a lot of gesturing and props in order to get the point across and for the most part, it was successful .... Honestly, after thinking about this, I was surprised that anyone was able to understand the task at all. Therefore, we needed to think outside the box when a person didn't understand the task right away.

Mary focused on problem-solving, kindness, and a positive attitude in her reflection stating:

The clinic days also taught me a lot about problem solving. Many times, the people we were testing did not speak English, so being able to problem solve and work my way through these situations was very important. I also learned that a smile and a few gestures can go a long way with someone, which improved my people skills. I never had a problem talking with people, but this trip showed me that niceness can go a long way, even if the other person does not speak the same language as you. Additionally, language barriers can be worked through and it is possible to communicate with someone even if you think it is impossible. It only takes positivity and a little bit of hard work.

Participants commented on the importance of teamwork and creativity with statements such as, "I think this was important for me to ask questions to others. This taught me the importance of working as a team which is a valuable skill to have in the future" (Debbie). Harriet also stated:

I didn't think creativity would be something I would work on during the trip, but it helped a lot. It was great that we could work as a group to help communicate. Being an SLHS major you would think that I would understand how important communication and communication skills are, but I feel like this trip gave me a whole new appreciation for it.

Participants also realized that a common language is not essential for communication with comments such as:

I realized that there are ways to communicate and have fun without using language ... in one of the schools, we were really able to connect with some of the children by showing them some dance moves. This really showed me that you can connect with people all over the world in so many ways other than just words .... I will take this knowledge with me throughout life and use this resourcefulness to communicate with others who speak another language instead of just assuming that an interaction with them is impossible (Rita).

By the conclusion of the program, participants felt they had increased their confidence which is demonstrated by statements such as,

... by the end of our time there with practice and support from my supervisors and peers I felt so confident in myself and my abilities. I think that this confidence has started to affect other areas of my life as well.... (Kim).

Overall, participant reflections within this theme indicated a desire to learn more about different others and travel, as well as the development of communication skills with diverse others in challenging situations.

**Category 2: Theme 3: Flexibility.** Overall, the maximum proportion of final reflection comments (33.5%) were classified within the sub-themes of ability to see another viewpoint, and flexibility towards differences and emotional reactions.

*Ability to see other viewpoints.* Upon conclusion of the program, several participant comments in this sub-theme (19.2%) spoke to their shift in perspective such as:

After coming to the realization that India is not what I had anticipated, I had to spend a lot of time reconstructing my idea of what India is. What really helped me reshape that view was the people we encountered. I was overwhelmed by the compassion and support we received from all the people we worked with. Starting with NISH and all throughout our time in India, people were excited to share there [*sic*] culture with us as we traveled and learned about their lives (Kim).

Colleen compared her experience as a foreigner in India to experiences in the U.S. stating, “Coming back to the U.S. I was thinking about how we treat foreigners, even those who are American but look different. We treat foreigners in a much different way ... some treat them with hostility rather than hospitality.” Jessie shared a slightly different sentiment saying,

In the U.S. people don’t seem to make others feel as comfortable as they did for us. No matter if people are from America or not, we seem to treat everyone the same. Whereas, in India, if they see someone not from there they treat them differently.

People taking pictures of our group in India caused many participants to feel uncomfortable, and Rita summed it up saying,

It’s important to put yourself in their shoes in order to understand it .... People take pictures of things that are unfamiliar to them. Therefore, I see why they want to take pictures .... Although, I wasn’t always comfortable with the pictures, I was able to put myself in their shoes and better understand their motives.

Some participants spoke about recognizing the economic disparities they encountered and gaining a deeper understanding of poverty and self-help. For example, Colleen stated:

I realized how different poverty is there compared to the U.S. I respect the poor of India so much more than I previously had thought. The fact that those who are poor are so happy and are not looking for pity and they make do with what they have has really lifted my spirits .... I love that they wanted to help themselves and they were not upset but were willing to contribute to the help that they were receiving from ODP.

There were many comments around the cultural differences that the participants observed and the realization that differences are acceptable, and one culture is not better than the other, such as Della’s reflection:

... when I noticed the NISH students doing something that I normally wouldn’t, I really pushed myself to think about why they do it differently than I would .... I really appreciated that our NISH friends were willing to discuss why they think certain ways, and my buddy

even said ‘we just do things different!’ and it was perfectly okay. It is important that we acknowledge our differences so that we can really learn from each other and realize that it is perfectly fine to think in different ways.

The topic of arranged marriage was a difficult one for participants to understand, and Rita summed it up by saying:

This trip has changed my life by showing me that different cultures do things in different ways but that’s okay and important. Throughout the trip, I saw that Indian culture is quite a bit different than American culture. However, one way isn’t right, and another way isn’t wrong. Differences don’t mean that one culture should switch in order to match the other. For example, many people in the Indian culture take part in arranged marriages. When we first started talking about it in class, I thought arranged marriages were crazy and wrong. I didn’t agree with a marriage that wasn’t based on love. However, I’m sure many of them don’t understand our love marriage in American culture. Many of them probably see love marriages as silly and a waste of time, especially since about half of them in the U.S. end in divorce. Neither way is the right or the wrong way of doing things. It’s just a difference of culture and these differences are important.

Finally, participants also noted differences in the education system and clinics, and Sara summarized by stating:

Their clinic was structured very differently from ours and we found pros and cons of each clinic. The Purdue students liked how the NISH students get to start working in the clinics in their first year, especially since we don’t get much clinical exposure until graduate school. However, the NISH students said that they liked that we didn’t have to start clinics during most of our stint as undergraduates because they sometimes felt like they were thrown into situations where they didn’t know everything they needed too [*sic*]. This showed us that neither clinic was perfect and that we could take this time to learn from one another and not idolize one or the other situation.

*Flexibility towards differences and emotional reactions.* Overall, 14.3% of final comments were in this sub-theme, with a large number of comments devoted to differences in the concept of time in India. Participants expressed that they noticed the difference in the concept of time and how cultures may perceive time differently saying,

... In India, people seemed more lax about being on time to appointments, scheduled activities .... I think that this has helped me with my patience and opened my eyes to the idea that someone’s understanding of time could be influenced by their culture (Betty).

Many participants also expressed how they handled this difference with comments such as,

We encountered many instances of having to adjust to ‘Indian Standard Time’ throughout the trip, which I think we all struggled with to some extent, but I learned to be flexible and to appreciate the extra time I had to get ready or to talk with and get to know other members of the team while we waited (Janice).

While in India, participants encountered a variety of other differences for which they had to develop flexibility. One aspect was the hospitality that many participants felt was excessive, and Dora described as:

When it comes down to it, I'm just like them. Yes, there are differences, but we're all people trying to interact and learn from each other. To me there was no need for the special treatment .... Over our time spent in India, I got used to this and just had to realize that this is how it's going to be. The people we interacted with in India were so hospitable and that's just part of the culture.

Another aspect was the stares that the group received with people wanting to take photos of the participants. Rita reflected on this saying,

I'm not sure I was completely ready for how much we encountered it [stares and pictures] while in India .... I really didn't understand the point of the pictures and what they would do with them later. However, as the trip went on, I was able to develop a tolerance.

A third aspect was the persistence of street vendors as they followed us, which Cate reflected on, stating:

It was usually not very bothersome, but there were some areas with higher concentrations of tourists that we were followed around for a long time. In these circumstances where I would get frustrated and want to react negatively, I just had to remind myself that selling these items is a livelihood for these vendors so they often do what they feel they need to in order to make a sale. Keeping this in mind, I was more patient and always tried to simply say 'no thank you' rather than getting upset or reacting negatively when approached or followed.

Cate also addressed the differences in the speech and hearing educational programs stating:

One subject that I often found tricky in discussions with students and professionals from India was the way the education system works in the United States, specifically in healthcare. Although it is not perfect and there would definitely be benefits to having clinical experiences as an undergraduate, I felt that I constantly had to explain myself and defend the system because it is so different than in India. However, the more I got asked about this, the more I was able to layout the advantages and the disadvantages between the differences. This way I did not feel that I was defending one system over another, but then I was able to compare them and see how they both have value. I was also able to learn more about education in India and see how it also has positive and negative aspects.

Many participants, such as Dora, reflected on the stress of the clinic days saying:

I was frustrated and wished things were running more smoothly. In this moment I just had to take a deep breath and relax. I had to change my mindset to be more flexible and just tolerate the situation. Yes, this is not usually how things would happen in the U.S., but this is India. I just had to remember that. There is a different way of doing things in India .... In these types of moments, I just had to take a step back to realize this and remember all of this is out of my control and I should go with the flow.

The concept of time in the clinical environment was addressed with this comment from Kassie:

... after we observed this type of interaction during a hearing aid fitting (where the patient was asked to wait for a long time while something was prepared), I began to adjust to the idea that this was the norm. While at home I would have perceived this as disorganization or a lack of preparation, it was more typical in India, and it was in no way an indication of

a lack of respect for my time—an adjustment for me as someone who is chronically early. It was subtle situations like this where I learned to be positive and flexible instead of impatient.

Many emotional reactions expressed in the final reflections referred to frustration and even anger regarding the difference in the concept of time such as:

I found myself becoming frustrated and almost angry at the lack of timeliness and the disorganization at the various clinics we took part in. However, I quickly told myself to breathe and relax. I was not back home, and I had to kick in my flexibility and adapt to the way things were in India (Mary); and

While I would say our interactions and experiences were overwhelmingly positive, probably the most challenging part for me, which I noticed especially at NISH, was adjusting to a more flexible attitude when it comes to timing and organization. I was taken aback at first by waiting for 30 minutes for someone to come talk to us, or by patients not showing up, or by our morning plans completely changing, and it was hard for me to reserve judgement. (Kassie)

Rita interweaved flexibility and emotional reactions regarding the concept of time into a positive framework in her comment:

Also, the lack of concern for being on time in the Indian culture allowed me to improve my flexibility and tolerance skills ... we would often wait 30 minutes after the decided departure time for our bus driver and before the community hearing screening .... This can be very frustrating because the U.S. puts a major emphasis on being on time. If you are late, especially to professional events like work and school, it is considered rude. However, the way we do it isn't the right way to do it and the way they do it isn't the wrong way to do it. It's important to just accept the difference in culture and do your best to adjust to it .... Although this really tested my patience and flexibility at times, I think that it was a good lesson for us all that time isn't always as important as the U.S. culture makes it out to be.

Overall, reflections in the theme of Flexibility suggested that participants developed an increase in their ability to understand and accept cultural differences (e.g., level of hospitality, concept of time, etc.) despite initially having negative emotional reactions to some of the differences.

## Discussion

The primary aims of this study were to replicate the SA program to Zambia with a different destination country: India and assess whether the *SLHS in India* program was effective in increasing participant ICC, using both quantitative and qualitative data. Previous work (Krishnan et al., 2017a) has demonstrated that intentional ICL activities were an essential component of the SA program in order to develop ICC. Overall, in this study, both quantitative and qualitative data support the finding that the immersive service-learning program with intentional ICL activities throughout the curriculum was effective in increasing ICC.

### **Quantitative data.**

Quantitative data using the IDI® indicated a group mean increase in the DO score of 13.23 points in 2018 and 13.84 points in 2019. This increase is similar to the score increases reported in the two groups of participants who went to Zambia: a 14-point increase in the 2015 group and 10.7-point increase in the 2016 group (Krishnan et al., 2017a). These findings suggest that the service-learning model used for these SA programs, with the inclusion of intentional ICL activities and reflection can be an effective approach to increasing ICC. The DO score increases in this study are larger than score increases demonstrated in many previous studies (e.g., Paige et al., 2004; Watson et al., 2013). This may be due to the program model that included (a) intensive intentional ICL activities over a period of about six months, both pre-departure and in India; (b) a service learning model that involved extensive collaboration with local community partners including students in the destination country; and (c) daily guided reflections and de-briefings. The outcomes of this study are further strengthened and add to the literature by the addition of a control group that had not travelled abroad, which no previous study in the field has included to our knowledge.

### **Qualitative data.**

The extensive qualitative data obtained in this study complement and add to the findings demonstrated by the quantitative data. Although previous work in SA has used qualitative data, the comparison of pre-departure reflections obtained after completion of ICL activities in the U.S. and final reflections at the conclusion of the program to India adds a new layer to the available body of literature. The pre-departure ICL activities appear to have primarily facilitated participants' knowledge of others (26.9%), self-awareness (15.6%) and curiosity and openness (14.5%). These reflect the focus of the pre-departure activities on getting to know diverse others through participating in events and/or reading and reflecting about cultural differences, which led to an increased knowledge of others. Additionally, the reflective exercises appear to have also led participants to become more aware of their own biases and realize that they can learn more about diverse others by being more curious and open to differences. The number of post-program comments in these three sub-themes all declined. During the immersive experience in India, comments related to self-awareness declined by a factor of three to only 4.9%. This decline may suggest that due to the intensive and immersive nature of the in-country experience, participants appeared to be more focused on navigating the new culture and differences, rather than on themselves. Comments in the curiosity and openness sub-theme decreased by half to 7.4%, which may indicate that since participants were in a completely new and foreign environment, perhaps curiosity and openness were a natural and integral aspect of the immersive experience. Although comments in the sub-theme knowledge of others did decline, possibly due to the extensive pre-departure preparations learning about Indian culture, they were still substantial at 16.3%.

Comments in other sub-themes increased post-program, and some make obvious sense, for example, comments in the sub-theme of program impact doubled from 10.2% to 20.2% indicating that participants felt that the immersive experience in India was perhaps more impactful than the pre-departure ICL activities. Activities in India were immersive, and students were engaged with the community all day, every day, likely making the experience more impactful than the pre-departure activities that were spread out across several weeks. Comments in the skills sub-theme increased ten-fold from just 1.1% pre-departure to 10.4% at the conclusion of the program. This was as expected, as the pre-departure ICL activities were focused more on learning about and exposure to differences, while participants had to apply their knowledge and build their skills

during their program activities in India. Finally, comments in the sub-theme of flexibility towards differences and emotional reactions increased four-fold from 3.2% to 14.3%, with many comments at the conclusion of the program focusing on differences in the concept of time in India. Overall, although final reflections may have been cumulative, the qualitative data suggest a possible differential impact of the ICL activities completed in the U.S. compared to the immersive experiences in India. The pre-departure activities primarily increased participants' knowledge of themselves and others and encouraged curiosity and openness towards diverse others. While the immersive experiences in India continued to increase participants' knowledge of others, they also increased participants' flexibility, helped them develop skills, and realize the impact of immersion.

### **Destination country.**

The findings of this study are similar to the findings from the *SLHS in Zambia* program. However, much of the previous work related to intercultural development via SA programs using the IDI® has been with programs to European nations such as France (Engle & Engle, 2004), the United Kingdom (Anderson & Lawton, 2011; Anderson et al., 2006; Pedersen, 2009, 2010; Rexeisen et al., 2008), and the Netherlands (Pedersen, 2009). Most of these studies have reported modest increases in DO scores with only two studies reporting >10-point increases in post-program DO scores (Pedersen, 2009; 2010) similar to our findings. Most studies of programs to non-European nations also report modest DO-score increases, although many larger studies do not separate outcomes by destination country. DO score increases of 2.5-5.1 points were reported in a study of 498 students who had semester-long experiences abroad (Watson et al., 2013). Students were learning languages, including Arabic, Chinese, and Russian, indicating that at least some of the destination countries were not European. Similarly, a 4.5-point increase was reported in a study of 86 students of whom 36% studied in non-European nations including some in South America, Central America, and Africa (Paige et al., 2004). Substantial differences have been reported among student scores based on destination country (Hammer, 2005); however, there were no details reported regarding these differences.

The DO score increases this study are consistent with previous findings from SA to Zambia (Krishnan et al., 2017a), suggesting that the immersive service-learning model used in these programs can be effective regardless of destination country. However, this conclusion must be treated with caution as the cultures in both Zambia and India are very different from Western cultures such as in Europe and the U.S. Examining a SA program to a European country developed using a similar model is required to determine whether this model is indeed effective regardless of destination country. Given the modest findings in many other studies, and the finding that not every participant's DO score increased, further research is also needed to identify individual factors that may be important in facilitating the development of ICC.

### **Assessment of intercultural competence.**

Scholars in ICC have differing opinions on the definition of ICC and have no consensus on the best assessment tool to measure it. However, they agree and recommend a mixed methods approach of using both quantitative and qualitative data to assess the complex issues of ICC (Deardorff, 2006). In this study, quantitative data were obtained using the IDI®, a valid and reliable instrument specifically geared to measure ICC (Hammer et al., 2003). Qualitative data, which substantiates and supports the quantitative data, indicating development in knowledge, skills and attitudes were set within the framework of the AAC&U Intercultural Knowledge &

Competence VALUE rubric (AAC&U, 2009). The outcome measures of the *SLHS in Zambia* and *SLHS in India* programs, grounded in a sound theoretical framework, are the only such studies in the professions of audiology and SLP.

### **Pedagogical approaches to teaching intercultural competence.**

Despite a lack of consensus regarding pedagogy to teach ICC to students in audiology and SLP, the majority of institutions use an approach that infuses this content across the curriculum (Stockman et al., 2008). The available literature on the effectiveness of pedagogical approaches to teaching ICC appears to suggest that courses dedicated to multiculturalism may be more effective than infusion throughout the curriculum (Stockman et al., 2008), and that even when using an infusion approach, more explicit and direct references to cultural differences may be beneficial to students (Halvorson-Bourgeois et al., 2013). With more than three quarters of degree-granting institutions in audiology and SLP offering SA programs, which naturally lend themselves to intercultural learning, this study indicates that it would be beneficial to include intentional ICL activities in the curriculum of these SA programs. Other lower cost approaches to teaching cultural competence also need to be investigated. One such approach in which undergraduate students served as communication partners to English language learners at their institution has been described (Vale & Arnold, 2019), but more work in this area is needed.

### **Limitations and Future Directions**

There were some limitations to this study. Although the in-class and program ICL activities were the same for all participants, the individualized ICL activities that participants were free to choose could not be standardized. Activities suggested in the IDP® vary according to the developmental orientation of each participant and therefore could not be the same for all participants. Another limitation was that despite the differences noted between the pre-departure and final reflections, and while final reflections often spoke about activities in India, the final reflection may be viewed as cumulative, and not completely separate from the pre-departure reflection. Finally, there was no oversight of control participants' exposure to ICL activities. Although control group participants did not participate in the course specific ICL activities, it was possible that they attended intercultural events or had other types of exposure to ICL activities.

Future research should focus on other, more economical pedagogical approaches that can reach the large number of students who do not study abroad. Specific research questions include: will intensive ICL activities incorporated into an on-campus course, without a service learning SA component, be effective in increasing ICC; are ICL activities completed in the home country differentially effective compared to activities completed abroad; are specific types of ICL activities, such as face-to-face or hands-on activities, more effective than others, such as online or virtual activities; are there individual factors that lead some participants to show large increases in IDI® DO scores while others do not.

### **Conclusion**

The overall findings of this study indicate that a SA program using a service-learning model that incorporates intentional ICL activities can be an effective approach for increasing participant ICC as measured by IDI® DO scores. Findings were similar to previous work in Zambia, but in a

different destination country: India. Findings were strengthened by the addition of a control group that did not travel abroad. Additionally, in this study, qualitative data were analyzed at two points in time: pre-departure and at the conclusion of the program. Although the final reflections may reflect participant perceptions of the entire program, the data appear to suggest that pre-departure activities may enhance different aspects of cultural competence compared to activities abroad. These findings add to the growing literature on pedagogical approaches to incorporate ICC education for students in audiology and SLP.

## Acknowledgements

We gratefully acknowledge the following individuals for participating in, collaborating, and supporting the *SLHS in India SA* program to make it a success: all faculty and staff members at each of our community partner organizations in India, individuals and families who participated in the clinics and whom we worked with, Purdue and NISH student participants, and the co-leader of the study abroad program, Ravi Krishnan.

## Disclosures

Lata Krishnan and Chuck Calahan are salaried employees at Purdue University. Lata Krishnan received Study Abroad and International Learning (SAIL) grants from Purdue University for the exploratory trip to India in 2017 and for student subsidies in 2018 and 2019. She also received a research mini-grant from the Purdue University Center for Intercultural Learning, Mentorship, Assessment and Research (CILMAR) to compensate control group participants. The authors have no non-financial disclosures.

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