



7-1-2014

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### Recommended Citation

Sood, D., Cepa, D., Dsouza, S. A., Saha, S., Aikat, R., & Tuuk, A. (2014). Impact of International Collaborative Project on Cultural Competence among Occupational Therapy Students. *The Open Journal of Occupational Therapy*, 2(3). <https://doi.org/10.15453/2168-6408.1111>

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# Impact of International Collaborative Project on Cultural Competence among Occupational Therapy Students

## **Abstract**

Occupational therapy (OT) educators recognize a need to ensure that OT students are culturally competent. The researchers developed the International Collaborative Project on Cultural Competence (ICPCC) to help students understand the impact of cultural context on client care. Entry-level MOT students from a university in the US (N = 18) collaborated with BOT students (N = 4) and advanced MOT students (N = 9) from two universities in India using an online course management system WebCT. The study explored the impact of the ICPCC on OT students' cultural competence and discusses students' perceptions of culture on the OT process. The Inventory for Assessing the Process of Cultural Competence Among Health Care Professionals Revised<sup>®</sup> measured students' cultural competence at baseline and immediately after participation in the ICPCC. Qualitative data was collected using a Self-Reflection Form. There was an increase in the cultural competence scores among all three groups of students after participating in the ICPCC at p value < .05. Three themes emerged from the qualitative data analysis: meaning of the term culture, impact of cultural on client-centered practice, and impact of cultural on OT outcomes. OT students recognized the role that cultural differences play in OT evaluation and intervention.

## **Keywords**

International collaboration, culture, global partnership

## **Cover Page Footnote**

This manuscript and research is a result of a Governors State University Research Grant that was awarded to the first and the second author of the study in 2010. We would like to thank Dr. Elizabeth Wanka, DrOT student, MOT, OTR/L and Kimberly Tate, MOT, OTR/L who helped us with data organization and management. We are grateful to the Center for Online Teaching and Learning at Governors State University for providing us with resources to make this research possible. We would like to thank all of the student participants of the study.

## **Credentials Display**

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According to the United States (U.S.) Census Bureau, ethnic minorities will account for 48% of the U.S. population by the year 2050 (Murden et al., 2008; United States Census Bureau, 2004). As the cultural diversity of the U.S. population increases, it is crucial for occupational therapy practitioners to be sensitive to the impact of cultural factors on the health and well-being of their clients. Practitioners who are culturally competent can have a positive impact on occupational therapy interventions and outcomes for their clients (Wells, 2011). Occupational therapy educators must ensure that their students are culturally competent and able to meet the needs of a diverse client population.

### **Background**

The term culture may have various definitions. For many, culture is defined as a way of life, consisting of predictable patterns of values, beliefs, attitudes, and behaviors among groups of people (Mandell & Novak, 2005). Awaad (2003) notes that as a dynamic concept, culture entails ongoing integration, adjustment, and adaptation. Iwama (2007) discusses the unique relationship between culture and occupation. Noting that culture develops and creates meaning and purpose in everyday participation in life, Iwama emphasizes the relevance of cultural competency to occupational therapy in addressing the needs of an increasingly diverse client population. Culture is also multi-dimensional and can operate at different levels—regional, community, family, and individual (Krefting & Krefting, 1991)—and thus continues to evolve and is increasingly dynamic in

its relationship to occupation and occupational therapy.

A culturally competent practitioner recognizes that culture shapes and defines behaviors. Cultural competence is a continual process of developing relevant and sensitive practice strategies and skills within a diverse client population. According to Betancourt, Green, Carrillo, and Ananeh-Firempong, cultural competence encompasses

understanding the importance of social and cultural influences on patients' health beliefs and behaviors; considering how these factors interact at multiple levels of the health care delivery system . . . ; and finally, devising interventions that take these issues into account to assure quality health care delivery to diverse patient populations. (2003, p. 297)

Although once thought to eliminate cultural biases and/or discrimination by providing culturally competent care, client-centered practices are now being recognized as falling short in providing this kind of care.

Sumsion and Smyth (2000) investigated what occupational therapy practitioners perceived as the common barriers to implementing client-centered practice. They identified barriers that occurred when the occupational therapy practitioner's goals differed from the client's goals, and when the occupational therapy practitioner's

values and beliefs differed from those of the client. One of the major challenges faced by occupational therapy practitioners in providing client-centered care is separating their personal and professional attitudes from those of the client within a diverse client population.

Every client and family may have unique needs, and a culturally competent practitioner is able to identify how each client experiences his or her uniqueness within a social context (Wells, 2011). Limited cultural competence among occupational therapy practitioners can compromise the quality of care and adversely impact their ability to meet the true needs of the clients and their families (Wells, 2011).

### **Addressing Culture in Occupational Therapy Education**

Effective occupational therapy educators, supervisors, researchers, practitioners, and professional leaders recognize the impact of cultural diversity in relationship to clients, families, students, and colleagues (Wells, 2011).

Recognizing the importance of culturally relevant practice by the various health professions in promoting the health and well-being of clients served by the health care system heightens the need for educators to infuse cultural awareness and sensitivity into the educational experience of all students in the health professions (Pew Health Professions Commission, 1995). The Accreditation Council for Occupational Therapy Education (ACOTE) acknowledges within the accreditation standards for a master's degree-level occupational

therapy program that intervention plans and strategies must be culturally relevant (ACOTE, 2011).

Effective as of July 2013, standards B.1.6, B.4.7, and B.6.6 represent culturally relevant content required within the 2011 ACOTE standards. Standard B.1.6. requires that students “demonstrate knowledge of global social issues and prevailing health and welfare needs of populations with or at risk for disabilities and chronic health conditions.” Standard B.4.7 requires that students “consider factors that might bias assessment results, such as culture, disability status, and situational variables related to the individual and context.” Standard B.6.6 requires that students “utilize national and international resources in making assessment or intervention choices and appreciate the influence of international occupational therapy contributions to education, research, and practice.” This mandates that master's degree-level academic educational programs in occupational therapy include national and international resources within their curriculum (ACOTE, 2011).

In a study conducted by Murden et al. (2008), occupational therapy students expressed a desire for curriculum-based course work that would expose them to cultural experiences that can have an impact on their ability to be culturally responsive practitioners. In the same study, participants who were a year postgraduation expressed that their education focused less on increasing their cultural awareness, and as a result, during the fieldwork

experience, they had little appreciation for the impact of culture.

Educators acknowledge the need to integrate topics on culture into their courses, but many may perceive adding new material to their existing course loads as burdensome (Stone & Matteliano, 2008). Also, educators have identified a lack of both diversity and time as limiting factors in providing experiential multicultural learning opportunities in entry-level occupational therapy programs within the US (Brown, Muñoz, & Powell, 2011). Occupational therapy programs, in terms of the student body, faculty, and context, are not adequately prepared to provide students with rich multicultural experiences. Educators are challenged to organize and create cultural experience for their students. These experiences take time not only for educators to plan and organize, but also for students to complete and reflect upon. Even though these challenges exist, it is imperative that entry-level occupational therapy programs provide multicultural experiences that will foster culturally competent practitioners. Further, there is a need for stronger evidence-based multicultural training methods within occupational therapy programs (Brown et al., 2011).

### **Providing Opportunities for Cross-Cultural Learning Experiences**

The literature on cultural competence offers several strategies for providing experiences that enhance cultural awareness and sensitivity among occupational therapy students. Simonelis, Njelesani, Novak, Kuzma, and Cameron (2011)

examined the experiences of students from the University of Toronto, Canada, the supervisors, and the on-site staff who participated in the international fieldwork placement at Immortelle Children's and Vocational Centre in Port of Spain, Trinidad. The participants perceived that international fieldwork facilitates a mutually collaborative learning experience in furthering professional knowledge, clinical reasoning, and team work. The students had to negotiate cultural differences by discussing varying cultural practices and beliefs with local practitioners. The students also had to learn to embrace cultural differences by being flexible and appreciating contrasting views on disability and communication style. Therefore, international fieldwork experience fosters awareness, understanding, and the acceptance of other cultures among students. Although international fieldwork experiences reap the benefits of cultural competence, they are costly and require extensive planning to organize and maintain the fieldwork contracts. Therefore, international fieldwork experiences are not feasible for the majority of the entry-level student population.

Chen, Caropreso, Hsu, and Yang (2012) presented another interesting possibility for developing cultural competence among students. They state that students need to acquire not only an awareness of and sensitivity to cultural issues, but also the communication and collaboration skills necessary to work with people of different cultural backgrounds. Online learning communities provide such opportunities for students through primarily

asynchronous written discussions in which students share experiences with the mutual goal of creating new knowledge. Learning communities function on the basis that learning is an active process in which the student constructs an individual reality of the world from prior experience (Kilpatrick, Barrett, & Jones, 2003).

Online learning platforms provide opportunities for students to construct knowledge when appropriately facilitated by an instructor (Chen et al., 2012). Educators using technology to construct knowledge can influence the way students approach learning (Buckley, 2002; Schleyer & Johnson, 2003), thus offering educators another strategy for engaging students in the active learning process (Buckley, 2002; Hollis & Madill, 2006; Rogers, 2000).

According to Chen et al. (2012), creating cross-cultural collaborative online learning experiences for students provides educators with the opportunity to enhance the student learning experience. Facilitating knowledge co-construction in which students from different cultures share and gain new knowledge from one another enhances the experience. It should be noted, however, that creating effective cross-cultural collaborative experiences for students requires the formation of global partnerships.

Global partnerships can increase the understanding of cultural diversity and health and generate mutually beneficial research to the contributing countries. Effective partnerships through collaboration with a variety of cultural

partners have advanced the occupational therapy profession. Yet there is still much to learn about how to develop global connections resulting in international partnerships that contribute to the advancement of occupational therapy education, research, and practice (Hansen, Muñoz, & Suarez-Balcazar, 2013).

### **Purpose of Study**

The profession of occupational therapy acknowledges that an occupational therapy education should include topics related to culture and its impact on the occupational therapy process and client care. This mandates that occupational therapy educators create cultural experiences for occupational therapy students within their coursework; however, educators face a number of challenges when developing and organizing such experiences.

In an effort to advance occupational therapy students' understanding of cultural diversity and its impact on the occupational therapy process and client care, the researchers of the current study (first and second authors) developed a global partnership with two universities in India. Through an online learning experience called the International Collaborative Project on Cultural Competence (ICPCC) program, students from the entry-level Master of Occupational Therapy (MOT) program at Governors State University (GSU) in the US collaborated with a group of students from the Bachelor of Occupational Therapy (BOT) program at Manipal University in India and another group of students from the advanced Master of Occupational

Therapy (advanced MOT) program at Guru Gobind Singh Indraprastha University in India using an online course management system called WebCT (Course Tools). The researchers developed culturally sensitive didactic experiences within the occupational therapy pediatric assessment and intervention course that was offered in the entry-level MOT program. The researchers intended for the participating students from both countries to share experiences and gain knowledge from one another in order to understand the influence of cultural differences and cultural practices on the occupational therapy assessment and intervention process for children and youth.

The current study was guided by two research questions:

1. What is the impact of the ICPC program on the perceived levels of cultural competence among occupational therapy students from both the US and India?
2. What are the perceptions of the occupational therapy students on the importance of understanding the impact of culture on the occupational therapy process after participating in the ICPC program?

For the purposes of the current study, the Process of Cultural Competence in Delivery of Health Care Services Model, developed by Dr. Josepha Campinha-Bacote (2002), informs the concept of cultural competence. According to this

model, cultural competence is a developmental process and is defined as “the ongoing process in which the health care provider continuously strives to achieve the ability to effectively work within the cultural context of the client (individual, family, community)” (Campinha-Bacote, 2002, p. 181).

## **Method**

### **Study Design**

This pilot study used a mixed methods research design to examine the impact of the ICPC program on the perceived cultural competence of occupational therapy students. One group pretest-posttest quasi-experimental design was specifically used to explore the first research question. Qualitative data generated from a self-reflection form was used to explore the second research question.

### **Participants**

A total of 31 students participated in the ICPC program. Group 1 consisted of eighteen students from the MOT program at GSU. The MOT degree is the entry into the profession of occupational therapy in the US. These students were in year two of the two-year program. Group 2 consisted of four students from the BOT program at Manipal University in India. The BOT degree is the entry into the profession of occupational therapy in India. These students had finished four years of required coursework and were completing a six-month mandatory clinical internship. Group 3 consisted of nine students from the advanced MOT program at Guru Gobind Singh Indraprastha University in India. The advanced MOT is a two-

year program that requires a practicing occupational therapist in India to specialize in a field of interest, such as neurology or orthopedics. These students were in the first year of the program.

### **Assessment Tools**

**Inventory for Assessing the Process of Cultural Competence Among Health Care Professionals Revised (IAPCC-R<sup>®</sup>, Campinha-Bacote, 2002a).** The IAPCC-R<sup>®</sup> is designed to measure the level of cultural competence among health care professionals and graduate students in the allied health fields, including occupational therapy. The IAPCC-R<sup>®</sup> uses a Likert scale to measure five cultural constructs: (a) cultural awareness, (b) cultural knowledge, (c) cultural skill, (d) cultural encounters, (e) and cultural desire. The scale consists of 25 items and scores range from 25-100. The scores indicate whether an individual is operating at a level of cultural proficiency, cultural competence, cultural awareness, or cultural incompetence. A score of 25-50 indicates cultural incompetence, a score of 51-74 indicates cultural awareness, a score of 75-90 indicates cultural competence, and a score of 91-100 indicates cultural proficiency. The scale has strong psychometric properties that have been established by several researchers (Campinha-Bacote, 2002a). Permission was obtained from Dr. Campinha-Bacote to utilize the IAPCC-R<sup>®</sup> for the purposes of this study.

**Self-Reflection Form (SRF, Sood & Cepa, 2010).** The SRF asked the participants to rate their perceptions related to the knowledge gained in the

following areas: (a) the impact of cultural factors on the occupations of children, (b) the impact of cultural factors on child development, (c) the impact of cultural factors on occupational therapy evaluation planning, and (d) the impact of cultural factors on occupational therapy intervention planning. The SRF also asked the participants to reflect on the importance of cultural factors in occupational therapy evaluation and intervention.

### **Steps Involved in Development, Implementation, and Evaluation of the ICPCC Program.**

**Step 1: Establishing international partnership.** In order to develop cross-cultural collaborative online experiences for the entry-level MOT students, the first step was to identify potential international partners. The faculty from the program of occupational therapy at GSU initiated a dialogue with the two programs in occupational therapy in India and discussed the goals of the program. The development of an international partnership required sharing common goals and an open attitude toward learning from one another.

**Step 2: Building online learning communities.** The ICPCC program defines an online learning community as “a body of individuals who use computer networks to share ideas, information, and insights about a given theme or topic to support the ongoing learning experiences of all the members” (Fontana, 1997, p. 4). The members of these communities benefit from the collaborative and collective analysis and synthesis of information on a common topic.



In order to develop an online learning community, it was essential first to explore the electronic media platform that was available to the researchers at GSU. The researchers used the electronic media platform WebCT with support from the Center for Online Learning at GSU to design a course webshell for the ICPC program. WebCT, currently owned by Blackboard Inc®, is a proprietary virtual learning environment also referred to as a course management system licensed to the university for use in distributing electronic learning materials to students. All of the occupational therapy students and faculty from India were assigned user names and passwords to access the ICPC program course webshell on WebCT.

The language of communication was English. The students and faculty from both countries were proficient in reading, writing, and speaking the English language. The ICPC project utilized an asynchronous electronic discussion board to facilitate communication between the students and faculty from the various locations. Asynchronous sessions were identified as the most suitable method of communication because of the time zone difference between the two countries. The participants in the ICPC program had access to learning materials and an asynchronous electronic discussion board 24 hr a day, 7 days a week. Students and faculty could respond to the discussion board posts at their convenience.

The evidence on asynchronous online learning suggests that three factors are linked with

the success of online courses: a clear and consistent course outline, frequent student-instructor interactions, and a valued and dynamic discussion on a relevant topic (Swan, 2002). These three factors guided the researchers to develop the ICPC program online learning community.

After attaining permission from the GSU institutional review board, the researchers provided training to the faculty of the participating universities in India (third, fourth, and fifth authors of the study) in the use of the electronic media format WebCT through telephone and email. The faculty of the participating universities in India further provided training to their students on the use of WebCT.

**Step 3: Integrating culturally sensitive experiences into an existing occupational therapy course within the curriculum.** The evolution of the ICPC program began as a part of a pediatric evaluation and interventions course that is offered to the entry-level MOT students. The rationale for incorporating culturally sensitive didactic learning experiences into a pediatric course was that a child's life is deeply embedded within a cultural context. All children grow as members of cultural communities. It is important to know how childhood is supported and constructed in any community in order to understand child development. There are striking differences in child-rearing practices around the world. Cultural factors play a vital role in the way that families, caregivers, and society perceive of disability among children (Divan et al., 2012). Cultural factors can

influence the degree to which parents or caregivers are involved in various intervention strategies for their children (Danseco, 1997), as well as the treatment choices they make for their children (Mandel & Novak, 2005). Occupational therapy students need to understand what is meaningful and important for the families and children before they develop and implement interventions to meet the outcomes.

The didactic learning experiences for the program were informed by the Campina-Bacote’s Process of Cultural Competence in the Delivery of Healthcare Services, which states that the cultural competence process involves the integration of five constructs: (a) cultural awareness, (b) cultural knowledge, (c) cultural skill, (d) cultural encounters, and (e) cultural desire (Campina-Bacote, 2002b). Cultural awareness is “the self-examination and in-depth exploration of one’s own cultural and professional background”; cultural knowledge is “the process of seeking and obtaining a sound educational foundation about diverse

cultural and ethnic groups”; cultural skill is “the ability to collect relevant cultural data regarding the client’s presenting problem as well as performing a culturally based assessment”; cultural encounters is “the process that encourages the health care provider to directly engage in cross-cultural interactions with clients from culturally diverse backgrounds”; and cultural desire is “the motivation of the health care provider to *want* to, rather than *have* to, engage in the process of becoming culturally aware, culturally knowledgeable, culturally skillful, and familiar with cultural encounters” (Campinha-Bacote, 2002b, p. 182). Culturally sensitive didactic experiences in the ICPCC program included activities related to cultural awareness, cultural knowledge, cultural skill, and cultural encounters. The didactic experiences were divided into five sessions, and each session lasted for 7 to 10 days of discussion. The program was implemented during a 15-week semester. The learning objectives of each session are discussed in Table 1.

**Table 1**

*Learning Objectives of Five Sessions of the ICPCC Program*

<b>Session</b>	<b>Learning objectives of the session</b>	<b>Student Activity</b>
Session 1	Students and faculty explore their own cultural and professional background.	Online discussion
Session 2	Students identify common pediatric occupations within their country of residence.  Students identify the impact of culture on occupations of children within their country of residence.	Assigned readings followed by online discussion

Session 3	Students comprehend the impact of cultural factors on the development of children.	Assigned readings followed by online discussion
Session 4	Students interpret the impact of environment-related factors, such as the natural, built, social, political, and economic environment of a country, on the development of children.	Online discussion
Session 5	Students analyze the impact of cultural factors on the occupational therapy evaluation and intervention process.	Online discussion

**Step 4: Measuring outcomes.** Baseline data was collected on the participants related to the level of cultural competence using the IAPCC-R<sup>®</sup> (Camphina-Bacote, 2002). Following the completion of participation in the program, data was again collected related to the level of cultural competence using the IAPCC-R<sup>®</sup>.

**Step 5: Student and faculty self-reflection.** The SRF was used to generate data on students' perceptions related to the ICPCCC program and its effectiveness on topics related to culture and occupational therapy.

### Data Analysis

Data gathered from this study included both quantitative and qualitative elements. To analyze the change in the level of cultural competence in the occupational therapy student participants as measured by the IAPCC-R<sup>®</sup>, the Paired t-test was used. Following data collection, the student participants completed a SRF asking them to reflect on the importance of cultural factors in occupational therapy evaluation and intervention. This data was analyzed using the qualitative analytical process (Miles & Huberman, 1994) as discussed by Carpenter and Suto (2008). The process involved

three phases: (a) data reduction, (b) coding or indexing, and (c) conclusion drawing and verification. The data reduction phase required the researchers to go through the transcripts and highlight chunks of data that appeared to provide insights about the research question. In the data display phase, the researchers assigned code words to highlighted data fragments and then organized the data into specific categories. During the conclusion- drawing and verification phase, the researchers developed a number of overarching themes. Verbatim examples were included to provide a deeper understanding of the students' experiences related to their participation in the ICPCCC program.

### Results

#### Change in Students' Perceived Level of Cultural Competence

Ranges, means, and standard deviations of the IAPCC-R<sup>®</sup> scores for each of the three groups are shown in Table 2. Before participating in the ICPCCC program, the students from the entry-level MOT program at GSU (group 1) had the highest mean scores in IAPCC-R<sup>®</sup>, followed by the students in the BOT program at Manipal University (group

2), followed by the students in the advanced MOT program at Guru Gobind Singh Indraprastha University (group 3).

Table 3 describes the frequency of the student participants' competency level (culturally

incompetent, aware, competent, or proficient) among the three groups as determined by scores on the IAPCC-R<sup>®</sup> before and after participating in the ICPC program.

**Table 2**

*Pre-Post IAPCC-R<sup>®</sup> Scores by Student Groups*

<b>Group</b>	<b>N</b>	<b>Mean score</b>	<b>SD score</b>	<b>Min score</b>	<b>Max score</b>
Group 1 Pre	18	68.06	6.38	56	79
Group 1 Post	18	72.28	5.69	63	83
Group 2 Pre	4	67.00	6.98	59	76
Group 2 Post	4	72.25	3.77	68	77
Group 3 Pre	9	64.11	6.13	55	73
Group 3 Post	9	70.44	4.53	63	78

**Table 3**

*IAPCC-R<sup>®</sup> Competency Level Frequencies, Stratified by Student Groups Pre vs. Post Participation in the ICPC Program*

<b>Group</b>	<b>Culturally incompetent (25-50)</b>	<b>Culturally aware (51-74)</b>	<b>Culturally competent (75-90)</b>	<b>Culturally proficient (91-100)</b>
Group 1 pre N = 18	0	13	5	0
Group 1 post N = 18	0	11	7	0
Group 2 pre N = 4	0	3	1	0
Group 2 post N = 4	0	3	1	0
Group 3 pre N = 9	0	9	0	0
Group 3 post N = 9	0	7	2	0

Paired sample t-test was used to analyze the change in the level of cultural competence among the three groups of occupational therapy student participants. The results indicated that there was an increase in the mean scores on the IAPCC-R<sup>®</sup> scale for all three groups after participating in the ICPC program (see Table 2). Paired t-test for group 1:  $t = 4.6$ ,  $P = .00$ ; group 2:  $t = 6.54$ ,  $P = .01$ ; and group 3:  $t = 2.65$ ,  $P = .03$  indicate that the change in the level of cultural competence among the students in all three groups was significant.

### Themes Derived from Qualitative Data

Following their participation in the ICPC program, the participants were asked to reflect on the importance of cultural factors in designing evaluation and intervention in occupational therapy practice. The following three themes were derived from the qualitative analysis of the data.

#### Theme 1: Description of the term culture.

All of the participants had a unique perspective about the term culture. One participant defined culture as “something which grows as per an individual’s geographical location, societal and familial values, and morals and through one’s own sense of belief and ideologies.” Another participant stated that “culture involves interaction that we (individuals) have had with the social, physical, psychological and emotional experiences provided from our ethnic environments. These factors shape beliefs and values to some extent.” Another participant articulated that “culture defines how we interact with our environment. Culture can be developed from a system of people and the

environment that have an influence on someone’s life.” Another participant highlighted that “culture encompasses traditions, habits, philosophies, rituals, attitudes, priorities, and symbols. I think we each have a unique culture behind us and a unique perspective on shaping the culture in front of us.” Another participant stated that “each of us is a member of more than one culture, whether we chose to be or not, which makes each of us complex beings.” Family plays a vital role in influencing one’s culture. As stated by one participant, “culture to me means how you were raised; your custom, values, beliefs and traditions were all instilled into you by your family members based on your culture.”

In conclusion, for the participants, cultural factors referred to the factors such as lifestyle, habits and practices, dressing style, conservative cultural views of family members, the norms of local regions, and language. These factors influence an individual’s ability to interact with the environment and shape an individual’s beliefs, values, and ideologies.

#### Theme 2: Impact of cultural factors on client-centered practice.

All of the participants identified that understanding and considering a client’s culture and cultural background is an important component of evaluation and intervention. For example, participant 1 stated, “questions are asked that determine the level of involvement of one’s culture to an evaluation or treatment.” Furthermore, occupational therapy practitioners must be aware of their own cultural

background as they evaluate and intervene with clients as articulated by participant 6, “be aware of your own personal cultural biases” and “you have to adapt to the family situation in planning evaluations and assessments.”

Several of the participants detailed how differences in their client’s culture can specifically affect occupational therapy evaluation and treatment. Participant 12 pointed out that “certain cultures have a practice of kneeling during prayers so the evaluation and treatment can be planned keeping in mind that kneeling can’t be avoided by the client.” Additionally, participant 8 discussed how “in certain cultures, parents want female therapists for their daughters, not a male therapist.” Identifying how culture affects occupational therapy evaluation and intervention will support the practical implementation of treatment and help craft an approach that is client-centered: “We can provide a client-centered approach to their problems.”

The participants described the influence of cultural factors on client-centered practice specific to the occupational therapy evaluation and treatment planning process. One of the participants stated that “OT is client-centered and (as occupational therapy practitioners) we must understand what is important to the client. Cultural factors are extremely important and vital in designing evaluation and intervention.”

Participant 1 stated “cultural factors are very important in eval (evaluation) and intervention, and form an ever-present background or mosaic

against or within which we (occupational therapists) plan therapy.” Another participant stated, “it is important to consider everyone’s (the client’s) values and beliefs and the more you (the therapist) know your patient (the client), and the more you build that rapport with your clients, the better the outcome of your treatment will be.” Participant 2 further stated, “if we know the cultural knowledge (client’s beliefs, values, and attitudes) we (the therapist) can make the intervention better.” Participant 3 stated, “the goals (of a client) must be adaptive to familiar interests (of a client) to ensure (his/her) engagement and motivation (in the therapeutic process).” Overall, the emphasis was put on the importance and value of understanding the cultural factors that can impact the occupational therapy process.

**Theme 3: Impact of cultural factors on occupational therapy outcomes.** Finally, an underlying theme that most of the participants specifically stated is that in order to achieve successful treatment outcomes, an understanding and consideration of the client’s cultural differences is required. Participant 16 clearly summed up this point when discussing how knowledge and adaptation to a client’s culture “would surely go a long way in getting better compliance to therapy and hence better outcomes.” Consistent with this statement is participant 4’s statement, “the more you know your patient, and the more you build rapport with your clients, the better the outcome of your treatment will be.”

## Discussion

In alignment with the current demand for culturally relevant practice in occupational therapy, the ACOTE mandates that academic programs in occupational therapy include national and international resources in making assessment or intervention choices, and appreciate the influence of the contributions of cultural factors to education, research, and practice. Educators have voiced the importance of including topics on culture within their courses in occupational therapy but have identified a lack of diversity and time as barriers to providing multicultural learning opportunities within entry-level occupational therapy programs within the US (Brown et al., 2011; Stone & Matteliano, 2008). The need for programs like the ICPCC is vital. The ICPCC program provides an innovative approach to creating learning opportunities for students on topics related to culture and its impact on occupational performance by providing cross-cultural online learning communities. The ICPCC program provided a platform to share ideas, insights, and collaborative analysis specific to a given topic that supported the ongoing learning experiences of the participating students.

The main purpose of the current study was to explore the impact of the ICPCC program on levels of cultural competence among occupational therapy students, both from the US as well as from India. The results of the study highlight that the ICPCC program experience was effective in increasing the participants' level of perceived

cultural competence. According to Campinha-Bacote's model, cultural awareness is the ability to understand one's own culture and perspective as well as stereotypes and misconceptions regarding other cultures (Campinha-Bacote, 2002b; Hunt & Swiggum, 2007). With the majority of the participants achieving scores at the cultural awareness level, it can be interpreted that the students recognized group differences and acknowledged the need for better communication between cultures.

Another aim of the study was to discuss the perceptions of students related to the importance of understanding the impact of cultural factors on the occupational therapy process after participating in the ICPCC program. The occupational therapy students, irrespective of their residing country and the level of professional education, identified and stressed the importance of cultural factors on client care and the occupational therapy process.

Collaborative programs like the ICPCC substantiate the principle of global practice in occupational therapy. The faculty members from the participating universities in India stressed the point that although India has a backdrop of diverse cultural lineage, the occupational therapy practitioners are not adequately sensitive to the distinctions of different cultures and communities. With this in mind, the collaborative effort had a mutually beneficial effect. Through this experience, the students and faculty were empowered with the knowledge of cultural diversity and the process of inclusion in the practice of occupational therapy.

The faculty from India also highlighted that international collaboration will force the practitioners to think laterally, and the clinical reasoning guiding the occupational therapy process will be more grounded and global.

Programs like the ICPCCC provide a rich environment for students and faculty to reflect on the influence of culture on occupational performance. As occupational therapy practitioners, we cannot separate individuals from their environments. And the most valuable benefit of this experience as perceived by the faculty was to broaden the definition and scope of the students' perceptions of the term environment to include cultural factors along with an understanding of the physical and social environment.

### **Limitations and Suggestions for Future Work**

This study only consisted of one group of students from each of the three participating universities. The generalizability of this study was limited due to a convenience sample. Further studies are needed that provide such experiences to a number of occupational therapy students from the three universities. Also, the ICPCCC program experience was a part of a pediatric assessment and intervention course, and as a result, the discussions were centered on the pediatric population. In the future, experiences such as the ICPCCC program have to be provided throughout the occupational therapy curriculum rather than within one course. The researchers did not collect any data related to the prior experiences that the participating students may have had working with clients from diverse

cultures. In the future, it may be valuable to explore if the prior experiences and previous educational preparation of students influenced their cultural competence. The students in India had used the online course management system for the first time in their educational experience, whereas the students in the US had used the online course management system for at least one year. The researchers did not hear about any issues from the Indian students or faculty about the use and accessibility of the course management system. In the future we would like to collect more information specific to the feasibility of using alternative online delivery formats that would allow faculty to expand opportunities for students to participate in larger, more diverse online learning communities.

### **Conclusion**

The ICPCCC program, influenced by The Process of Cultural Competence in Delivery of Health Care Services Model developed by Dr. Josepha Campinha-Bacote, provided a rich environment for occupational therapy students to reflect on the influence of culture on occupational performance. The ICPCCC program emphasized the importance of cultural factors on a client's environment and the value of cross-cultural experiences in developing occupational therapy students' understanding of the impact of cultural factors on client care.

Overall, the IAPCC-R<sup>®</sup> results indicate that the ICPCCC program increased the level of perceived cultural competence among all of the participating occupational therapy students from India and the



US. As a result of participation in the ICPCC program, occupational therapy students identified that achieving successful outcomes of occupational therapy intervention requires the practitioner initially to recognize and always consider cultural

differences in the decision-making process. The participating faculty highlighted the value of cross-cultural online learning experiences in preparing students for global practice.

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