ABSTRACT: The need for applied behavior analysts is growing both within and outside of the United States (US) and the populations with which applied behavior analysts find themselves working are growing increasingly diverse. However, there are few published examples of how to initiate, establish, and maintain international partnerships. The goal of this paper is to describe an international collaboration that has sustained for several years in an effort to provide a resource for those who wish to develop or increase the sustainability of their own international collaborations. The collaborators’ goals, variables that contributed to the onset of their relationship, an analysis of some of the cultural systems that have presented barriers toward achieving their objectives, and some ways in which they overcome those barriers are discussed.

KEYWORDS: communities of practice, cultural competence, international collaboration

The Association for Behavior Analysis International (ABAI) has been a proponent of the international dissemination of behavior analysis and international representation in the discipline since its inception. Originally the Midwestern Association for Behavior Analysis (in 1974; Peterson, 1978) and then the Association for Behavior Analysis (in 1980; Daniels, 2017), ABAI added the subtext “An International Organization” to its name only four years later in 1978 (Craighead & Nemeroff, 2004) after a few graduate students started the International Development Committee (Malott, R., Lyon, & M. Malott, 2002; Morris et al., 2001). ABAI officially renamed itself as ABAI in 2004. ABAI now has 9,161 members of which 2,402 are from outside of the United States (US).2
The history of international activities at ABAI includes a number of international conventions—the first held in 2001 in Venice, Italy; several international delegations (e.g., Russia, China, Saudi Arabia; M. Malott, 2004); support and development of international chapters of ABAI; and international development grants provided through the Society for the Advancement of Behavior Analysis (SABA). Much of the focus of ABAI’s international activities, and in particular those of the delegations, has been on promoting educational initiatives through the establishment of university-based programs (M. Malott, 2003; 2004). Members of the ABAI international delegations publish brief descriptions of the goals, the activities, and the outcomes of each of the delegations in *Inside Behavior Analysis* (or its predecessors; see for example Fisher, Hayes, L., Logue, Marr, & M. Malott, 2005; M. Malott, Awasthi, Hubner, Parrot Hayes, & Sandaker, 2017; M. Malott et al., 2003). Summaries of the SABA grant awardees’ activities are also posted on the ABAI website. However, outside of these examples, there is a shortage of published examples on how to initiate, develop, and maintain international collaborations. Even the recent special section of *The Behavior Analyst* (now *Perspectives on Behavior Science*) focused on how several graduate training programs began (cf., Carr, Nosik, & Luke, 2016) did not feature any programs located outside of the US.

Simultaneously, the need for applied behavior analysts outside of the US is strong, particularly for those who are competent in the application of behavior analysis in the design of educational programs for individuals with autism spectrum disorders (ASDs) and intellectual disabilities (Keenan et al., 2015). In early 2017 there were 24,669 Board Certified Behavior Analysts (BCBAs) worldwide but just under 2000 were located outside of the US (Nosik, 2017). Some countries have very few, if any practicing behavior analysts (Behavior Analyst Certification Board, n. d.), let alone behavioral programs in university settings (see programs at Oslo Metropolitan in Norway, the University of Sao Paulo in Brazil, and the National University of Ireland Galway as examples of exceptions). Only 67 of the 271 BCBA-level verified course sequences and 53 of the 124 BCaBA verified course sequences are physically located outside of the US.³ If universities outside of the US employ behavior analysts, often they are the sole behavior analyst in a department or program comprised primarily of individuals with different theoretical underpinnings. As a result, the dissemination of behavior analysis has been difficult in many countries and a number of US-based behavior analysts (outside of the ABAI delegations) are called to support programs, to develop programs, and to train behavior analysts outside of the US.

Many behavior analysts then find themselves working in locations with clients for whom they are not adequately prepared. They may be skilled behavior analysts but they may lack cultural competence or cultural awareness (Fong, Catagnus, Brodhead, Quigley, & Field, 2016; Fong & Tanaka, 2013; Hayes, S., Rehfeldt, Tarbox, & Houmanfar, 2018; Sellers, Alai-Rosales, & MacDonald, 2016). Others have commented further on the difficulties encountered when behavior analysts based in the US consult internationally (see for example, Keenan, Dillenburger, Rottgers, & Moderato, 2010), noting specific issues regarding economics, cultural practices, broader systems differences, and a lack of support for widespread applications of behavior analysis in the international location. At the same time, behavior analysts practicing within the US are facing an increasingly diverse client base (Fong et al.; Sellers et al.).

If behavior analysis is to be truly poised to contribute to some of the world’s most pressing problems, it is critical that we improve our own diversity and our competence with respect to

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³ There are 195 countries in the world.
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communicating successful ways to impact that diversity and to strengthen the international dissemination of behavior analysis. It is our hope that sharing our experiences might encourage others to take a similar approach to identify and to adopt similar practices (when appropriate), and to share their experiences in initiating, developing, and sustaining international collaborations.

Therefore, the purpose of this paper is to describe a strategically developed, multi-year international collaboration among an American University, an Italian University and a learning center for children who are at-risk for school failure and for children with developmental disabilities. The collaboration has now sustained for over 8 years. We focus on the unique design of our collaboration, describing what we have found to be important variables for us when working internationally with culturally diverse populations and how instructional arrangements were created to foster the development of behavior analysts who are culturally aware. This discussion is organized in the context of the systems in which behavior analysts typically find themselves working or systems that often affect the delivery of services. Through constant discussion of, immersion within, and adjustments from each of collaborators and their students and employees, our repertoires have been strengthened to enhance the activities and the products of engagement and to sustain the collaboration over many years.

Collaborating Institutions

The collaboration involves three institutions: the Università di Parma, Centro Tecniche di Insegnamento per le Competenze dell'età Evolutiva (TICE Social Cooperative), and the University of North Texas (UNT). A brief description of the partnering institutions and the representative programs from each institution follows.

Università di Parma

In 2011, the first master’s in applied behavior analysis (ABA) was formed at the Università di Parma in the Department of Humanities, Social, and Cultural affairs (hereafter simply referred to as the Department of Psychology) to offer post-graduate programs in ABA to students coming from different academic disciplines (e.g., Psychology, Education, Speech Therapy, Neuro-developmental Disorders Therapy). Behavior analytic courses in the post-graduate program include up to 300 hours of face-to-face lectures about basic behavior principles, techniques, research and applications in behavior analysis, verbal behavior, and developmental and educational psychology; an intensive internship (up to 700 hours) during which participants have the opportunity to practice the implementation of behavior analytic principles with different populations under the constant supervision of doctoral level psychologists (some who are also behavior analysts) and BCBAs; a requirement to write three to four research papers concerning data collection and the implementation of behavior analytic interventions; and up to six individual meetings for those who want to create a startup or create their own educational consulting service agency (Cavallini, Carpitelli, & Corsano, under review). With the passage of Regolamento per la

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4 Learning center is used throughout this manuscript; however, TICE Social Cooperative (the learning center) is a social cooperative that roughly translates to a private, nonprofit organizations in US.

5 It is important to note that the word “masters” in the context of degree programs does not carry the same meaning in Italy as in the US. This is more fully described in the section on Training Behavior Analysts in University Systems.

6 A startup is defined as a new, small business that is focused on a strongly innovative idea or project. In Italy, this is the current term used to refer to this type of new business.
University policy that strongly encouraged collaboration with community partners, the faculty of the master’s in ABA partnered with TICE Social Cooperative to serve as the primary location in which students of the master’s would receive their supervised training.

**TICE Social Cooperative**

TICE Social Cooperative was founded in 2006 as a private learning center. It is one of only a few, behaviorally-based educational centers in Italy. Since 2006, TICE Social Cooperative has opened two additional learning centers such that there are now three learning centers located in two different provinces in Northern Italy. TICE Social Cooperative’s mission is to provide students ranging from birth to adulthood (>18) and their families with individualized educational programs focused on various academic, social, and daily living skills. The programs are grounded in the basic principles of behavior analysis and are specifically designed for different populations of students with different needs such as: early intensive behavioral intervention, preschool and school-aged children with ASDs, language delays, or other developmental disabilities; community integration and inclusion for adolescents and young adults with disabilities; homework support and the building of basic tool skills for primary school to high school aged students with learning disabilities and/or other learning difficulties; and learning and emotional support for adolescents and young adults who are at-risk; and are implemented in classrooms, commities, homes, and schools (Cavallini et al., under review).

**Department of Behavior Analysis at the University of North Texas**

The Department of Behavior Analysis (DBA) at UNT has been a stable force in the field of behavior analysis, particularly with respect to training behavior analysts and the dissemination of behavior analysis. The UNT DBA also has a long history of international collaborations through the development of online coursework, faculty and student exchanges in Brazil and Norway (among others), and additional collaborative efforts such as international summits on university-based training for behavior analysts working in autism intervention (e.g., Ala’i-Rosales, Roll-Pettersson, Pinkleman, & Cihon, 2010), and think tanks on cultural analysis (cf., Glenn et al., 2016; M. Malott & Glenn, 2006). A number of faculty have long standing international collaborations and the master’s program itself has a long history of international student enrollment.

**Collaboration**

In 2011, representatives from the Department of Psychology at the Università di Parma and the UNT DBA signed a memorandum of understanding (MOU), formalizing the collaboration between the two universities. The MOU detailed the specific activities to include: (a) reciprocal exchange of students, staff, and/or faculty, (b) collaborative research projects, and (c) other activities such as professional development conferences, symposia, and workshops. The nature of these activities has largely involved faculty and student exchanges between the respective institutions.

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7 Regulation for the discipline of the Università di Parma master courses, a decree from the University president, issued on October 7, 2002.
Our specific goals are to: (a) disseminate behavior analysis in Italy, (b) sustain a university-based program in behavior analysis in Italy, (c) support efforts to regulate the profession of behavior analysis in Italy, (d) improve behavior analytic service delivery in Italy, (e) foster the training of culturally competent behavior analysts in both the US and in Italy, and (f) produce and disseminate collaborative research in the US and in Italy. Table 1 depicts each of the domains, a brief description of each, the goals and the actions implemented to achieve them, and the outcomes obtained thus far.

Systems

Achieving these goals has required us to work within and across a number of systems. In an effort to identify the best practices to structure a meaningful and effective system of supervision and to enhance this professional exchange in the academic experience, we have discovered a number of differences in community and cultural systems that have presented specific barriers to sustaining the collaboration. Next, we briefly describe each system while noting the peculiarities of each. An example of at least one barrier that was encountered along with a summary of how we worked to overcome it is also provided.

Behavior Analysis as a Discipline

Behavior Analysis has not achieved a parallel status as a discipline in Italy as it has in the US, hence the initial and current need for collaboration with international professors. Behaviorism, as a philosophy within the larger discipline of Psychology, is described as having two roots in Italy beginning in the second half of the 1960s—one in Pavlovian conditioning and the other in operant conditioning (Moderato & Presti, 2006). The two groups of professionals joined for the first time in 1977 and established the Italian Association for Behaviour Analysis and Modification (AIAMC; Moderato & Presti). Since then, Italian behavior analysts have held a number of international conferences (including the first ABAI International convention in Venice and the first European Association of Behaviour Analysis [EABA] convention in Parma), translated and authored a number of texts, created a journal to publish behavior analytic content, been the recipients of SABA international development grants (Moderato, 2002; Tosolin, 2012), and formed two affiliated chapters of ABAI—the Association for the Advancement of Radical Behaviorism (AARBA) and the European Institute for the Study of Human Behaviour (IESCUM; Moderato & Presti). Yet, no undergraduate training programs and few graduate level training programs are housed in Italian universities. It was only recently that Italian behavior analysts began to obtain board certification (there are currently 106 certified behavior analysts at the BCBA or BCaBA levels and four BACB verified course sequences [VCS]) and that behavior analytic methodologies were publicly cited by the Italian government (in 2011) as the most efficacious therapy for children with ASDs (see Linea Guida 21; ISS, 2015). The primary push for the recognition of behavior analysis as a discipline and as a course of study has been made largely by Paolo Moderato di

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8 It is important to note that while the authors discuss regulating the “profession” of behavior analysis, all of the authors consider behavior analysis to be a science. However, a number of variables have led to an increase in the number of practicing behavior analysts and hence the profession of behavior analysis as it is referred to here.

9 There are, however, 1,175 ABAI members from Italy (data obtained from Dr. Maria Malott through Dr. Wendy Washington on July 5, 2018).
Table 1

An Overview of the Goals of the Collaboration, Actions Implemented to Accomplish the Goals, and Outcomes Reached to Date

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
<th>Goals/Actions</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>Dissemination</td>
<td>To enhance the dissemination of behavior analysis in Italy</td>
<td>Progressively grow a network of people interested in learning about behavior analysis who apply its principles and techniques from an experimental and evidence-based approach across settings</td>
<td>Over 90 students have completed the professional training program</td>
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<td>Over 70 students have completed the master’s program</td>
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<td>TICE Social Cooperative has opened three learning centers</td>
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<td>Over 10 additional learning centers have been opened by graduates of the master’s program</td>
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<td>University-Based Training in Behavior Analysis</td>
<td>To create and sustain a university-based program in behavior analysis in Italy</td>
<td>Creation of consistent and comprehensive degree programs and courses provided by public universities across levels of education (e.g., postgraduate master’s courses, professional development courses for non-degree seeking students, undergraduate courses)</td>
<td>Formalized postgraduate masters courses at the Università di Parma</td>
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<td></td>
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<td>Develop course sequences and degree programs that would meet the requirements to obtain status as a VCS through the BACB and accreditation through ABAI</td>
<td>Created professional development courses for non-degree seeking students at the Università di Parma</td>
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<td></td>
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<td>Completed 7 academic years of each of the aforementioned programs</td>
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<td>Continued progress toward incorporating behavior analytic coursework in degree programs and at the laurea triennale level</td>
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<td>Regulation of the Profession of Behavior Analysis</td>
<td>To support students seeking BCBA or BCaBA credentials</td>
<td>Support TICE Social Cooperative employees in obtaining BCBA supervised independent fieldwork hours in preparation for the BCBA exam who would in turn provide supervision hours to future students in Italy if the credential is obtained.</td>
<td>Three TICE Social Cooperative employees have obtained the BCBA credential and are supervising several of the students of the current and previous master’s</td>
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<td></td>
<td>Participating in meetings with leading behavior analysts in Italy to discuss certification practices</td>
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<td>In conversations with the Italian public health system to create</td>
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<tr>
<td>Service Delivery</td>
<td>To improve the quality of behavior analytic service delivery in Italy</td>
<td>Dissemination of evidence-based approaches to education in which students and practitioners are taught to identify best practices, constantly test their own implementation integrity, and evaluate their effectiveness through frequent assessment and ongoing research (consuming and conducting)</td>
<td>Coordinate(d) intensive training seminars (as supplemental to the master’s courses) focused only on clinical practice and assessment of implementation and outcomes</td>
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<tr>
<td>Cultural Competence</td>
<td>To foster the training of culturally competent behavior analysts in both the US and Italy to support their professional practice and experimental research with a comprehensive awareness of the cultural features and peculiarities of the systems with which they are interacting</td>
<td>Organize, conduct, and participate in faculty and student exchanges across the respective institutions</td>
<td>Over 40 students across the collaborating institutions have participated in an international exchange</td>
</tr>
<tr>
<td>Research</td>
<td>To produce and disseminate collaborative research in the US and in Italy</td>
<td>Development of a network of behavior analysts in both countries whose everyday practice in different professional settings is supported by a solid foundation in behavior analytic principles and research design</td>
<td>TICE Social Cooperative has published 17 papers in European and Italian journals</td>
</tr>
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</table>
The lack of recognition of behavior analysis as a discipline in Italy has presented numerous barriers, perhaps the most prevalent has involved our attempts to support the regulation of the profession of behavior analysis in Italy. Two particular barriers are of note: (a) opportunities for coordinated efforts among the leading behavior analysts in Italy and (b) the constantly changing requirements of the BACB. The first barrier has been addressed by participating in meetings with and arranging additional collaborative activities amongst the leading behavior analysts in Italy and supporting additional international collaborations among several behavior analysts at our respective institutions and across other institutions. The second barrier has been, perhaps, more difficult to overcome and is still present to a certain degree. For example, recently, the master’s courses at the Università di Parma were unable to maintain their status as a VCS when the BACB initiated its new requirements for the coordinators of VCSs. The requirements were changed such that the VCS coordinators must be a BCBA or BCBA-D and be employed as a full-time professor in the university (Behavior Analyst Certification Board® VCS Handbook, 2017).

No one at the Università di Parma or TICE Social Cooperative had achieved BCBA status as the credential was not widely recognized in Italy at that time and the Università di Parma did not employ the Italian professors as full-time faculty members (see section on Training Behavior Analysts in University Systems). This presented two problems. First, we needed someone who was a BCBA and second we needed someone employed full-time by the university – neither of which were possible in the timeline given by the BACB. In order to temporarily overcome this barrier, Cihon facilitated a conversation with Cavallini and the director of the online course sequence (Behavior Analysis Online) at UNT to create an opportunity for the students of the master’s in Italy to participate in another VCS as part of their masters’ coursework. Further, Cihon provided the necessary BACB supervision for three employees of TICE Social Cooperative who had already completed their master’s in the previous VCS such that a pyramidal system for supervision opportunities for Italian masters’ students could be created without the need to rely on support from international collaborators.10

More recently, however, we have learned the BACB would have been willing to support a transition plan for the VCS at the Università di Parma until the BACB requirements for continuing a VCS could have been met (N. Martin, personal communication, June 27, 2018). We have made

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10 An initial goal was to ultimately fade out the support needed from US-based behavior analysts. In many ways this goal has been accomplished; however, we have found many mutual benefits to continued collaboration that have sustained our relationship with each other.
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plans to continue discussions regarding the possibility of reestablishing the VCS at the Università di Parma in the coming months, corresponding with the onset of the 5th Edition BACB Task List.

Training Behavior Analysts in University Systems

The Italian university system differs in several very distinct ways from the US university system. First, degree programs follow more closely what universities in the US might refer to as a 3+2. Italian students take their first post-secondary degree (the laurea triennale) in a general area of study (e.g., Psychology, Biology, Educational Sciences) in three years and can then choose to continue beyond the laurea triennale for two additional years (the laurea magistrale) in a specialization area (e.g., developmental psychology, biomedical applications, designing and coordinating educational services). The laurea triennale is basically equivalent to the US bachelor’s degree and the laurea magistrale then is similar to the US master’s degree. Students achieving the laurea magistrale earn the title of dottore or dottoressa (not to be confused with the PhD in the US; graduates of the 3+2 program may continue their studies beyond the laurea magistrale to obtain the title of Dottore di Ricerca which is equivalent to the PhD in the US).

A second difference in the degree programs is that students who have finished the laurea triennale (or the laurea magistrale) may choose to complete a one/two-year program that offers a specialization but does not allow them access to additional levels of education (e.g., to obtain the Dottorato di Ricerca). A third difference in the university systems is the onset and offset of academic calendar years and course scheduling. In Italy, the academic calendar year starts and ends in November, whereas in the US the academic calendar begins in August and finishes in May. In the US, courses are typically offered in a 15-wk semester or 10-wk quarter and in Italy courses in psychology are typically offered in an intensive format in which lectures are delivered for several hours over the course of several days or a few weeks. Lastly, transcripts issued from universities in Italy list the course with a score from 18 (the minimum to pass the exam) to 30 (or 30 cum laude), in the corresponding course. Lower scores for failing the course, or indication of Incomplete, or Withdrawal are not reported (R. Olla, personal communication, March 24, 2018). Transcripts issued from US-based university systems report a letter grade, the scale so structured: A (or A+, corresponding to the Italian score 30 or 30 cum laude), B, C, D (corresponding to the Italian score 18), F (for failing the class), I (for Incomplete classes – to be finished according to the instructions by the professor), W (for Withdrawal). The difficulty arises given the lack of a conversion scale from number to letters. Similar situations are faced when comparing the US letter grade system with the grading systems from other countries. Nonetheless, because the grading system is different from the US-based universities (a number-based score system versus a letter-based score system) in Italian universities, the interpretation of the Italian transcripts can be especially difficult for a US-based (though international in scope) institution like the BACB.

We have faced two barriers in particular as a function of the differences in university systems between the US and Italy. The first is generally related to scheduling which has affected our goals to disseminate behavior analysis in Italy, to sustain a university-based program in behavior analysis in Italy, to improve behavior analytic service delivery in Italy, and to foster the training of culturally competent behavior analysts in both the US and in Italy. With the differences in academic calendar years and the duration of courses it has often been challenging to schedule

11 See http://attiministeriali.miur.it/media/211291/il_sistema_universitario_italiano.pdf for the official description issued by the Ministero dell’Istruzione dell’Università e della Ricerca of Italy.
student and faculty exchanges between the collaborating institutions. For example, for an Italian student visiting the US, it is ideal if they arrive at the onset of the fall or spring semester (August or January respectively) but the onset of the fall semester in the US coincides with the Italian summer holiday. If Italian students wait until their official semester start (November) they will be arriving in the US just before professors are administering their final exams. Further, for US-based professors coming to teach in Italy, they must leave in the middle of the semester which can present some problems for course coverage or in explaining their need to travel mid-semester to the university administration. We have generally been able to overcome the scheduling challenges with each collaborating institution making some small adjustments and compromises such as Cihon coming during spring break or the week of Thanksgiving and Italian students coming at the start of September rather than the last weeks of August.

The second barrier has predominantly interfered with our goals to sustain a university-based program in behavior analysis in Italy and to support efforts to regulate the profession of behavior analysis in Italy. The two options post laurea triennale are both commonly referred to as an Italian “master’s” degrees; however, this has been difficult to translate to the US-based certification and accreditation bodies for behavior analysis and for the collaborating US-based universities (such as in the case of Italian students completing online courses through UNT). A number of conversations have been required to ultimately determine that only the laurea magistrale is sufficient for the degree requirements relevant to the BCBA credential and the laurea triennale and/or the laurea triennale plus the one/two year professional training degree meets the degree requirements for the BCaBA credential, even if students participating in both “levels” of the Italian “masters” are taking the same courses (e.g., the same course is offered to students of both levels). Italian students are still frequently confused by the BACB degree requirements for each level of certification and the specific requirements for a transcript that denotes the courses taken (as previously described). We have met with a member of the ABAI Behavior Analysis Accreditation Board (BAAB) to discuss the differences in the Italian degree programs from degree programs in the US. However, the two levels of “masters” in Italy present an additional barrier with respect to the costs Italian universities incur in order for both programs to be evaluated by the ABAI BAAB. Justifying this cost to the Italian university administration when they see Italian students participating in the same core courses at the same time even if pursuing different degree options (the difference for the behavior analytic-based master’s described here is in the number of supervised research projects students at each degree level complete, not in the courses in which content is covered) is quite complicated, not to mention the challenging economic infrastructure of the Italian university system (see section addressing Economics Factors Influencing International Collaboration & Service Provision). At this time, there are no ABAI BAAB accredited degree programs in Italy.

**Behavior Analytic Services and the Healthcare System**

According to the last analysis from the Global Burden of Disease Study (GBD) in 2015, the Italian healthcare system is ranked 12th in the world (Barber et al., 2017), much higher than the US healthcare system. A characteristic feature of the Italian healthcare system is that it is universal, in the sense that it guarantees assistance for all citizens; this is possible because it is public and is funded by the Italian State through taxes and direct income (or co-pay). Service provision differs from region to region, and in the last few years the percentage of citizens accessing private healthcare providers has increased, largely due to growing waitlists and the reduction of public resources.
Behavior analytic treatment is not provided through the public healthcare system in Italy, except for in a very few regions or provinces, even though ABA has been deemed as the recommended treatment for individuals with ASDs (Linea Guida 21; ISS, 2015). However, given this recommendation, many families search both nationally and internationally for BCBAs who can provide consultation and program design for their children. Yet there are few options currently available nationally. This presents a barrier to our goal to improve service delivery in Italy. If behavior analytic services are not supported by the Italian healthcare system then it is challenging for aspiring behavior analysts to find employment in the public health system and for families to secure qualified professionals domestically.

Specific barriers to our goals then manifest themselves in attempts to regulate the profession of behavior analysis. There are few paid employment opportunities for graduating students of behavior analysis in Italy. One way in which this barrier has been overcome is through the emphasis on practical training provided through TICE Social Cooperative as part of the university program for behavior analysts. Moreover, TICE Social Cooperative serves as a major employer of students after they earn their laurea magistrale and complete the behavior analytic coursework. TICE Social Cooperative also supports graduating students who create startups like TICE Social Cooperative in different regions in Italy and/or who create independent educational consulting agencies which serve as additional organizations to employ behavior analysts and provide services nationally.

In addition, the meetings among the leading behavior analysts from different Italian institutions previously mentioned are being held in order to identify standards to regulate the profession of behavior analysis according to national specificities. These regulations can then be shared with healthcare institutions (in fact many Italian behavior analysts have been working to produce collaborations directly with the public healthcare system) in order to provide all families and children with comprehensive recommendations and services grounded in best practice (see as one example – ABAxTorino, a center created and directed by Paolo Moderato; Arriva ABAx–Torino, 2018; Autismo: si presenta il Centro ABAxTorino, 2018).

Behavior Analytic Services and the Education System

In 1977 an Italian law (Legge 517 del 4 agosto 1977) established the abolition of differentiated classrooms for students with disabilities, which set the occasion to enhance the growth of different forms and strategies for full inclusion for individuals with disabilities. The Italian school system has since developed a long and solid tradition focused on the importance of structuring educational environments specifically tailored for individualization within inclusive settings. In an effort to facilitate this tradition, teachers, healthcare professionals, behavior analysts, and families often engage in meetings to exchange information and to create educational objectives and strategies. These exchanges are more frequent when behavior analytic services are being rendered and are provided in a center-based program like that of TICE Social Cooperative in order to ensure the continuity of services across the child’s environments. This communication process can sometimes be difficult and is certainly not linear. Moreover, even if the Italian education system has shifted toward providing a more individualized approach to education, this approach runs in stark contrast to the collectivist orientation of the Italian culture. Further, behavior analysis has not been widely adopted by the public school system.

As international partners come to participate in these interactions, barriers related to cultural and linguistic practices occur (see also Social and Cultural Systems) which are further confounded
as educational placement, goals and objectives, and instructional and curricular design decisions are made. These considerations present barriers explicitly counter to our goals of improving service delivery.

One way in which we have sought to overcome these barriers is to immerse international partners in typical school and family life routines (i.e., fostering cultural awareness). Outside of organizing school observations (when school personnel are accepting of such observations), Cavallini ensures that Cihon (and her students) have opportunities to spend time with families with children of different ages and different familial compositions and to participate in different cultural activities such as birthday parties, dinners, and local community festivals. Ensuring opportunities to observe and interact in the traditional activities of Italian families helps international partners to better understand the cultural milieu of the families they may be called on to have conversations with about their child(ren). These opportunities then provide a stronger foundation regarding the families’ perspectives of the educational system and behavior analysis during consultations with international partners. For example, when Cihon participates in the exchanges between behavior analysts and families, she serves not only as a supporting expert who can help identify educational objectives and best practices in behaviorally-based education but she can also provide realistic and culturally sensitive suggestions for effective implementation and generalization.

Perhaps not so surprising, we have found more commonalities between the two countries’ educational systems and barriers to providing effective behavior analytic services than differences. However, this is not always the observation made by other international partners. For example, one of the students who had participated in a study abroad program designed by Cihon noted that they could not understand why behavior analysis was not being implemented in Italy the way “we” do it in the US and that, in fact, s/he did not learn anything new about behavior analysis during the study abroad program. Students of the Italian master’s have also commented that US-based behavior analysts are fortunate because they are always accepted in public school programs. Clearly there are things to learn about applying behavior analytic principles in new contexts and behavior analysts are not always warmly received in either of the public school programs. These comments from students of the respective programs provided opportunities to discuss the similarities and differences across the two countries and cultures with respect to behavior analysis in educational systems, which in turn helped us to determine the aforementioned ways to overcome such barriers.

The supportive actions of the current collaborators in the educational systems context seek to enhance the dissemination of behavior analysis among families and schools as well as to support the cultural awareness of aspiring behavior analysts. Linking clinical practice to the university system has also supported the need for embracing a behavioral approach to education as evidence-based and in a constant process of data collection and evaluation.

**Economics Factors Influencing International Collaboration & Service Provision**

Even though Italy generally shows a strong economy on measures such as the Gross Domestic Product (GDP) in both the European Union (4th) and the world at large (9th; The World’s Top 10 Largest Economies, 2017), economic forecasters have lamented about Italy’s financial crisis (Italy Economic Outlook, 2018). Factors such as the growing number of immigrants and the high unemployment rate, among others are contributing to the economic challenges facing Italy. These challenges impact the systems in which behavior analysis needs to grow such as the university, healthcare, and education systems. Particularly related to our collaboration, one reason the
Università di Parma does not employ a full-time professor in behavior analysis is economic in nature (though not solely as it is also impacted by the lack of a department of behavior analysis, the primary emphasis of other theoretical perspectives in psychology, and the criterion by which professors are evaluated in the university system – the latter a problem also in the US given many publication outlets for behavior analysts are not recognized by SCOPUS). Confounded with these factors is the economic burden then placed on the University to bring professors in from other countries to teach the necessary coursework to students who wish to study behavior analysis. The collaboration described here works within the private, non-profit system with respect to service delivery (TICE Social Cooperative) and in the public, non-profit system with respect to the university. TICE Social Cooperative’s position in the private, non-profit system works in a way that the cost of services for the children served is kept low such that families with lower incomes can be served. The burden on TICE Social Cooperative, as the primary location in which the supervised practice and research occurs, is to find grant funds to supplement the visiting professors’ travel costs and fees. And the burden on the Università di Parma, positioned in the public, non-profit system, is to cover the costs for bringing international professors from the university revenues generated by students’ tuition (which is quite low as compared to the costs of tuition in the US; the US master’s can cost upward of $20,000 US dollars/17,000 Euros each year where the Italian master’s costs only around 3000 Euros/$3500).

The economic structure of the Italian collaborating organizations then creates a barrier for bringing international professors to fill the void of Italian professors of behavior analysis to support the continuity of the university-based training programs and dissemination of behavior analysis in Italy. For example, the salary for a master’s level employee is regulated by the “contratto collettivo nazionale cooperative mutue” (or the regulations for agencies of the same type as TICE Social Cooperative in Italy) and ranges between 1000 Euros and 1600 Euros ($1200-$2000) each month. This is a stark contrast to the salaries that can be earned in the US by practicing behavior analysts that often range upward of $65,000 (52,000 Euros) each year or the daily consultation rates of US-based behavior analysts that can average around $1500 (1800 Euros) each day.

We have worked to overcome this barrier in two ways. First, Cavallini is constantly seeking additional funds through grants and other initiatives for Italian professionals in the healthcare and educational industries to improve their service delivery. However, this presents an additional barrier in that with each grant there are a number of new initiatives that are constantly being implemented at TICE Social Cooperative. This is good in the sense that it constantly pushes the boundaries of service delivery with respect to innovation but it is also challenging in that there is a simultaneous need to launch new programs while training students and employees in best practices in behavior analysis. Second, in the constant effort to find effective ways to implement an ongoing collaboration between our countries, Cihon has substantially reduced her fees to little more than the costs of travel. She resides with Cavallini and her family during her visits to Italy to reduce the costs associated with lodging (which has actually set the occasion to experience aspects of this collaboration that go far beyond the actual professional goals; see Social and Cultural Systems section). They both have also made adjustments in the case of student exchanges – typically Cihon or one or more of her graduate students house Italian students coming to the US and Artoni and Cavallini as well as their graduate students and TICE Social Cooperative employees house American students coming to Italy (again both of these arrangements have provided additional benefits particularly related to our work in training culturally responsive
behavior analysts). All of these adjustments have helped us to overcome the economic barriers we have faced.

Social & Cultural Systems

Social and cultural practices differ from culture to culture and from family to family within specific cultures. It is nearly impossible to have an all-encompassing knowledge of idiosyncrasies and similarities in and between (or among) cultures – let alone so quickly. However, having “just enough” knowledge can greatly influence the impact of the design and implementation of behavior analytic services as well as the construction and delivery of university-based courses. In this section, we provide a few examples of barriers we have encountered in these areas. Because there are many differences between the American and Italian cultures, we do not intend this to be an all-encompassing description of the differences between the cultures or to suggest that the differences noted here are representative of all Americans or Italians. And, even though a number of examples have already been provided in the previously described systems – it is difficult to consider educational systems for example without considering social and cultural systems or to consider specific examples of social or cultural systems without framing them in the context of other systems – some additional examples are provided here. Further, the examples of social and cultural practices we note are only a sample of those we have discovered through the nature of this specific collaboration.

First, the contingencies surrounding social and cultural practices in Italy and the US differ with respect to reinforcement for behaviors consistent with individualistic or collectivist orientations. Since the beginning of our collaboration, this established the need to create opportunities for both parties to come into contact with new and different contingencies concerning scheduling and how to effectively disseminate information to master’s students and families – to circumvent possible barriers to our collaboration.

The US-based teaching style of behavior analysts, for example, typically relies on active student responding (e.g., Twyman & Heward, 2018), discussion, learning by doing, and cooperative projects. The Italian-based teaching style is still heavily grounded in the transmission of knowledge through lecture-based seminars (though perhaps not so different from traditional university-based instruction in the US). Further, graduate training programs in the US are, from an Italian perspective, more challenging (R. Olla, personal communication, March 24, 2018). There are a number of differences with respect to the expectations of the students of the Italian masters and the expectations Cihon initially had as a visiting professor that caused barriers to the effective dissemination of information early on. For example, Cihon initially sent readings associated with the content she had prepared for her courses with the expectation that students would have read the material and would have come to class prepared to discuss the information. After quickly learning that this was not easily accomplished by the students in the Italian master’s, she adapted her course of instruction to include having the students read portions of the manuscripts in class. This provided the opportunity for her to support the translation – not just from English to Italian but also the translation of a technical language of behavior analysis. In subsequent courses then, it prompted her to incorporate Say All Fast Minute Every Day Shuffled (SAFMEDS; Graf & Auman, 2005) at the onset of a new cohort of students in the Italian masters to learn about Precision Teaching and fluency-based instruction through the students’ own practice of a SAFMEDS deck for See Italian Technical term/Say English Technical term. This practice in translation also makes access to behavior analytic literature written in English more easily accessible to the students.
Further, it provided more opportunities for her to reinforce active student responding in her courses. Student responding is maybe even more important when teaching (in English) to students for whom English is not their first language in order to gauge understanding of the concepts and principles covered. Cihon has taken to bringing mini erasers which she provides contingently for questions asked, comments made, or certain achievements related to SAFMEDS frequency aims. These mini erasers have become a sort of trademark of hers with students in the master’s program. She has also mastered enough of the Italian language to teach some concepts in Italian.

Moreover, Cihon has needed to adjust many of the examples she uses to illustrate certain behavioral concepts and principles – not just in the example itself but also in the wording used to explain the examples. She has found that her own work in learning the Italian language has helped her to speak in a way that makes direct translation easier for the students – for example, while Americans brush their teeth, Italians wash their teeth - when giving an example that involves dental hygiene she will frequently say “washing teeth” rather than “brushing teeth” to ease the translation and subsequent understanding. Having access to teaching in the classrooms at TICE Social Cooperative as well as in the university-based classroom also gives her access to more explicitly relevant examples that the masters’ students are encountering in their supervised clinical practice such that these can be embedded in the course content.

Another example of differences in the social and cultural systems of the collaborators that might have generated barriers to effective collaboration has been related to the use of time and scheduling. Americans are very regimented with respect to time or are “linear active” (Lewis, 2005). Meetings are generally scheduled in advance, people arrive punctually, and there is a specific agenda that keeps the meeting participants on track. Italians, conversely, are less regimented with respect to time or are “multi active” (Lewis). The emphasis then is on developing and fostering relationships among collaborators and clients, in addition to accomplishing the work-related goals. For example, oftentimes the first 15 min (or more) of meetings focus on this crucial component of the Italian culture – relationship building – and meetings begin with much talk about one’s personal life. Breaks are not just to use the restroom and check your phone but instead involve relationship building in the context of other cultural-based activities such as going to get a coffee and/or a snack and then returning to the meeting. Travel details are often not arranged in hour-by-hour detail like in the US but are arranged in a more general way (e.g., this day you will be [here]). When Cihon sent her first student abroad, we knew she had housing, we just did not know exactly where until the day the student arrived.

These social and cultural differences are explicitly reinforced in each partnering individual's learning histories. When they conflict, they can present barriers. However, now, as collaborators for many years, we have become incredibly accustomed to “swaying” between cultures, such that frequently we are not even “aware” of when we are shifting in and out of each other’s cultural perspectives. Typically, now, we are only aware of such cultural differences when these differences pose barriers to continued progress toward our shared goals. Moreover, many of these barriers may have only been discovered due to Cihon’s basic access to the Italian language, Artoni and Cavallini’s proficiency in English, Cihon’s immersion in the Italian culture during her international activities and additional opportunities she has made while in the US (e.g., she is a member of the Italian Club at UNT), their generally shared reinforcers, and their additional time spent together. It is only when there is a source of conflict that these differences now come to the forefront.
 Nonetheless, earlier in the collaboration there were more examples of when one or more of the international partners had to choose whether or not to make a “cultural shift”. We have overcome these barriers through clear and open communication of the conflicts when they arise, continual discussion of and immersion in each other’s respective cultures, and a great amount of flexibility and compromise leading to the willingness for all of us to adjust our own personal cultural and social histories and expectations such that the goals of our collaboration can be achieved.

Closing Remarks

Keenan et al. (2010) notes differences in family life, language, schooling and health care systems as just a few particular examples of the challenges posed by international collaborations. Yet, where does one look to determine how one might overcome some of the cultural barriers described by Keenan et al. (2010) when consulting outside of the US? Moreover, what does it take to initiate, develop, and sustain a successful international collaboration?

According to the data and examples presented here within, one factor contributing to our success in sustaining our collaboration is that we have taken an approach that is much like the one employed in behavioral community research (e.g., Fawcett, 1991; Meyers, Meyers, & Craighead, 1981). Specifically, our emphasis has been on constructing a collaborative relationship that designates both sets of stakeholders, though with different sets of knowledge and cultural backgrounds, as equal contributors who are learning together, rather than designating US-based collaborators as the “researchers” who are developing interventions for the Italian-based collaborators as the “participants” or recipients of services. This approach has prevented a scenario in which someone who is from the outside is doing something to someone who is on the inside. Instead, it has resulted in a sort of recombinative situation in which the collaborating behavior analysts, regardless of country of residence, have developed new repertoires, new sets of shared reinforcers, and respect for individual differences in reinforcers and repertoires through cultural competence. The shared reinforcers in particular, manifested in the goals of the collaborators, have been critical to our success.

A second variable that has contributed to the success of our collaboration has been the focus on immersion in and discussion of our respective cultures. Oftentimes, behavior analysts consulting outside of the US spend only a few days in that country and with their clients in order to minimize costs (Keenan et al., 2010; Keenan et al., 2015). However, those spending only a few days in diverse cultural settings may not be exposed to the number of variables that impact implementation of behavior analytic programs or translation of behavior analytic research in different countries (Keenan et al., 2010; Keenan et al., 2015). It is impossible to learn everything about a particular culture without extended exposure and immersion yet a possible and effective compromise might be that international consultants, visiting faculty, and/or student exchange programs could, at a minimum, ensure visiting behavior analysts spend a little more time or engage in a few more activities that immerse them in the culture. A bit more time or a few more activities might ensure that visiting behavior analysts can learn “just enough” about the culture to adjust their approaches to teaching, program development, and supervision to be culturally sensitive (of course “just enough” would need to be defined).

Cultural competence (though deserving of a paper focused on its definition and development in its own right; also see Fong et al., 2016 and Fong & Tanaka, 2013 for a further discussion of cultural competence in behavior analysis) might be conceptualized as a behavioral cusp (Rosales-
Ruiz & Baer, 1997) or a skill that once learned allows the learner to access new learning opportunities that were once unavailable that are now perpetuated by access to new, preferred consequences (e.g., in the same way that one can access new learning opportunities and consequences when transitioning from crawling to walking). Strategically designing international collaborations like the one described here, in areas in which behavior analytic services might not yet be readily available, might provide occasions to foster cultural competence as a behavioral cusp among behavior analysts. Further, they might provide information that highlights specific barriers one might face when working across international boundaries or with members of ethnically and racially diverse cultures. Moreover, it could elucidate additional cultural considerations and contextual factors that are important to behavior analysis and program design while improving the nature of the collaboration itself (see Appendix 1 for further advice for successful international collaborations). Nonetheless, prior to having worked in an international or a culturally diverse setting, one might not have considered what questions to ask or what barriers could arise, risking the nature of the continuity of the collaboration before it has even started.

The confluence of the factors discussed here have provided the contingencies for our success and allowing us to form, perhaps, a unique community of practice (see Wenger, 2000). Our behavioral repertoires and practices have gradually created new values that are constantly pursued and that govern our decisions. These values then have allowed us to adapt and persist even in the face of practical, social, linguistic, or institutional barriers. The collaboration described here might even be considered a cultural cusp (e.g., M. Malott, 2016a; 2016b; Glenn et al. 2016) though we hope others can replicate similarly successful and sustainable international collaborations.
Appendix 1.

*Recommendations for Successful International Collaborations.*

- Find international partners with mutual goals and reinforcers
- Each partner is equal and has valuable information to contribute to the partnership
- Emphasize collaborative rather than one-sided efforts
- Immerse one another in each other’s respective cultures and cultural practices
- Learn as much of the language as you can
- Experience a variety of cultural practices spanning across systems
- Engage in conversations and activities that foster cultural competence
- Learn about where you are going or from where your international guest is arriving
- Learn about the history and current place of your discipline in that location
- Maintain open lines of communication
- Talk about the topics that are difficult to talk about
- Empower national initiatives that enhance your collaboration
- Foster domestic standards that incorporate global regulations
- Prepare your students and/or faculty before embarking on exchange programs
- Bring what you learn back to your students and colleagues
- Increase the opportunities for dialogue with relevant service systems
- Develop new, shared reinforcers along the way
- Develop a community of practice
- Recognize the value in sustained international collaborations
- Promote independence from international partners
References


