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Ethical Challenges Encountered in Delivering Behavior Analytic Services Through Teleconsultation

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Teleconsultation, or providing consultation using remote technology, is quickly becoming a new modality for service delivery in applied behavior analysis. However, its use also presents specific ethical and practical issues for the behavior analyst. Specifically, practitioners may encounter issues relating to client confidentiality and protected health information, electronic data storage and transfer, consent for services, training of non-behavior analytic staff, and maintaining beneficence and nonmaleficence when providing behavior analytic services via remote technology. In this article, we describe these ethical and practical challenges that may be encountered when providing behavior analytic services through teleconsultation and provide recommendations for how to address these challenges. The ethical and practical considerations are illustrated through case descriptions from our experience developing a teleconsultation model of services. In addition, our discussion is framed within the Behavior Analyst Certification Board's and American Psychological Association's ethical codes as well as the Health Insurance Portability and Accountability Act of 1996.

Keywords: teleconsultation, behavior analysis, problem behavior, functional behavior assessment, ethical issues

Teleconsultation is the application of communication technologies to consult and deliver services in real time across long distances (Boisvert, Lang, Andrianopoulos, & Boscardin, 2010). Sometimes, this is also referred to as *telehealth* or *telemedicine*. Several studies have shown that teleconsultation can be a cost-effective way to deliver services (Alnemary, Wal-

lace, Symon, & Barry, 2015; Barretto, Wacker, Harding, Lee, & Berg, 2006; Frieder, Peterson, Woodward, Bourne, & Garner, 2009; Gibson, Pennington, Stenhoff, & Hopper, 2010; Machalick et al., 2009, 2010; Wacker et al., 2013). Teleconsultation is a potential solution to the lack of Board Certified Behavior Analysts (BCBAs) available for providing effective and evidence-based interventions for problem behavior in children with autism spectrum disorder (ASD). Although teleconsultation is a viable solution, there are many ethical considerations that need to be addressed prior to using this mode of service delivery. The purpose of this article is to describe ethical and practical challenges that may be encountered when providing behavior analytic services through teleconsultation, and to provide recommendations for how to address these challenges. The ethical and practical considerations that follow are illustrated through case descriptions from our experience developing a teleconsultation model of services for children with ASD in Michigan exhibiting problem behavior. We suggest that these ethical challenges and our recommendations are relevant to the broader context of BCBAs providing teleconsultation services in the assessment and treatment of problem behavior for indi-

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viduals with other related developmental disabilities.

Current estimates are that the prevalence of autism is 1 in 68 children (Centers for Disease Control and Prevention, 2015). This prevalence has been increasing over the past 10 years. In 2012, the Michigan Department of Education reported that nearly 16,000 children with ASD were receiving special education services in the Michigan public schools (compared with 1,203 in 1990), with an additional 1,300 children born with ASD every year (based on current prevalence rates; Michigan Department of Education, 2012). It is anticipated that Michigan, like most other states in the United States, can expect continued growth in the population of individuals with ASD, necessitating an even larger demand for services over time.

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013) characterizes ASD as individuals having perseverant deficits in communication and social interaction, and stereotypic behaviors, interests, and activities. Symptoms are typically detected early during the individual's development and must cause significant impairment in functioning. Common presentations of children diagnosed with ASD include (a) deficits in communication (e.g., limited functional communication such as mands and tacts, limited vocal/verbal repertoire); (b) restrictive, repetitive, stereotyped patterns of behavior (e.g., effective reinforcers are limited to specific movies or toys, conversations a restricted to specific topics); (c) abnormalities in response to the physical environment (e.g., not responding to one's name or orienting to loud noise); (d) abnormalities in affect (e.g., flat affect, tantrums); (e) deficits in intellectual functioning (e.g., lower scores on standardized tests such as the IQ test); (f) displays of disruptive behavior (e.g., self-injurious behavior, aggression); (g) deficits in social behaviors (e.g., difficulty developing or maintaining interpersonal relationships); and (h) deficits in attachment (e.g., refusing to be held, avoiding physical touch; Schreibman, 2005). Although there is no cure for the disorder, it is possible to ameliorate many of the core deficits of autism with specialized intervention services (National Research Council, 2001). The U.S. Surgeon General's Report (U.S. Department of Health & Human Services, 1999) states that "thirty years

of research demonstrated the efficacy of applied behavioral methods in reducing inappropriate behavior and in increasing communication, learning, and appropriate social behavior" (p. 164). Even today, most evidence-based practices for the treatment of autism are based on the principles of applied behavior analysis (National Autism Center, 2015).

It can be difficult for children with ASD to access evidence-based treatments because the number of professionals who can provide such treatments are limited. The primary intervention agents for behavioral intervention with children with ASD are BCBAs. In Michigan, like many states, there has been an increasing trend in BCBAs over time. The Behavior Analyst Certification Board's (BACB's) website (www.bacb.org) indicates that the number of behavior analysts in Michigan was 188 in 2013, 265 in 2014, and 603 at the time of this writing (September 2017). The current estimates suggest that anywhere from 1,500 to 2,000 BCBAs are needed to serve the children with an ASD in Michigan (Grost, 2015). Thus, although the upward trend in the number of behavior analysts in Michigan is encouraging, the supply of behavior analysts is far afield from the number needed to serve the autism population in Michigan.

As stated previously, one primary area of concern for individuals with ASD can be problem behavior, which may consist of aggression, self-injury, destruction, noncompliance, tantrums, and the like. Conducting a functional behavior assessment (FBA) prior to developing an intervention for problem behavior has become best practice in disability-related fields. In fact, the Individuals with Disabilities Education Act (2004) requires schools to conduct an FBA anytime a placement change is being considered for a child with disabilities as a result of his or her behavior problems, and for subsequently developing a behavior intervention plan (BIP). FBA is an umbrella term for many different forms of assessments, including indirect assessments (i.e., interviews, rating scales, and checklists), descriptive assessments (i.e., antecedent-behavior-consequence observations within natural routines), and functional analyses (i.e., formal hypothesis testing that consists of manipulating independent variables thought to maintain the problem behavior, within an experimental design; Neef & Peterson, 2007). FBA is a "process that involves a lot of highly

discriminated professional behavior” (Hanley, 2012, p. 55, original emphasis). Thus, it is often the case that a BCBA should be involved in conducting an FBA for a child. BCBAs have a special set of skills and training that typically makes them more qualified than other professionals to conduct such assessments (Hanley, 2012). In a state like Michigan, where there exists a significant shortage of BCBAs to meet the needs of children with an ASD, there is likely a strong need to provide support and consultation to professionals who are not trained in behavior analysis to effectively assess problem behavior in order to develop effective and evidence-based BIPs for children with an ASD. However, providing that support with a limited number of behavior analysts across a geographically large state—and one that has many rural areas—can be a challenge, as travel time to site locations may prohibit access to consultation for many individuals.

Background Information on Our Service Model

Our services were initiated through a project aimed at training professionals to conduct FBAs via remote technology. The goal of the project was to train professionals to proficiency in basic technologies of FBA, such as indirect assessments (interviews), direct assessments (antecedent-behavior-consequence data collection and standard functional analyses), and function-based behavior interventions (selecting, implementing, and analyzing treatment outcomes), while providing ongoing consultation to providers of services for children with an ASD. The outcome data from our project are in preparation for a different manuscript.

It should be noted that during this project, we collaborated with centers within our state. All services were conducted in those centers and our team connected with clinicians working directly with children with ASD. Clinicians engaging in teleconsultation may not always follow this model of services. For example, some professionals may connect directly into client’s homes. Connecting directly to clients and families can create issues regarding security of the location where services are being provided. Additionally, clinicians may also connect to individuals in outside states. Delivering services to clients in different states introduces licensing

restrictions. Specifically, a clinician could be licensed to practice in one state but not in another. Clinicians and other professionals need to be aware of these issues and laws within and across states when implementing teleconsultation services. Furthermore, readers could reference Rios, Kazemi, and Peterson (in press) for more information on ethical considerations on various teleconsultation models.

Ethical Challenges in Teleconsultation

We describe a series of ethical challenges that we identified prior to the onset of the project, as well as challenges that arose while delivering telehealth services. For each challenge identified, we referred to the guidelines and compliance codes of the American Psychological Association ([APA]; 2010) and the BACB (2014), as well as the Health Insurance Portability and Accountability Act ([HIPAA]; 1996). The specific codes and information cited in the remaining sections of this article can be found in Tables 1, 2, and 3. Although these challenges may not be unique to teleconsultation, they are compounded by delivering services remotely.

Client Confidentiality and Protected Health Information

Relevant issues. The first issue to arise was with respect to the protection of client confidentiality. HIPAA (1996) is a law aimed at protecting all personally identifiable health information held or transmitted by a covered entity or its business associate, in any form or media, whether electronic, paper, or oral. This information is called protected health information (PHI). Any information that relates to the provision of services, an individual’s mental health condition, and/or to the identity of an individual is considered PHI. This law applies to any and all health care providers and professionals who provide medical and health services to individuals.

In addition to HIPAA, the APA has related guidelines concerning the protection of confidentiality. For example, APA Standard 4.01 states that psychologists have a responsibility to protect any confidential information that is obtained and stored through any medium (APA, 2010, p. 7). Furthermore, APA Standard 4.03 states that prior to recording the voices and

Table 1
Cited American Psychological Association Ethical Codes

Code	Title	Definition
2.01a	Boundaries of Competence	Psychologists provide services, teach and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study or professional experience.
2.01d	Boundaries of Competence	When psychologists are asked to provide services to individuals for whom appropriate mental health services are not available and for which psychologists have not obtained competence necessary, psychologist with closely related prior training or experience may provide such services in order to ensure that services are not denied if they make a reasonable effort to obtain the competence required by using relevant research, training, consultation or study.
4.01	Maintaining Confidentiality	Psychologists have a primary obligation and take reasonable precautions to protect confidential information obtained through or stored in any medium, recognizing that the extent and limits of confidentiality may be regulated by law or established by institutional rules or professional or scientific relationship.
4.03	Recording	Before recording the voices or images of individuals to whom they provide services, psychologists obtain permission from all such persons or their legal representatives.
7.01	Design of Education and Training Programs	Psychologists responsible for education and training programs take reasonable steps to ensure that the programs are designed to provide the appropriate knowledge and proper experiences, and to meet the requirements of licensure, certification or other goals for which claims are made by the program.

images of clients, consent to do so must be obtained (p. 7). As behavior analysts, it was also important for us to consider the BACB's (2014) Professional and Ethical Compliance Code for Behavior Analysts. Many areas of the BACB's Compliance Code align with HIPAA and APA standards, such as the protection of confidentiality and the maintenance of records (Sections 2.06a and 2.07a, p. 5). The BACB also has guidelines in place for the electronic recording of sessions. For example, section Compliance Code 2.05c protects clients by requiring behavior analysts to obtain consent for all of the different ways they might use recorded material (p. 7).

Teleconsultation involves the delivery of services over the Internet. In a typical service delivery model, a service provider would see a client in the privacy of a clinic room or the client's home or school. The risk of a breach of confidentiality is low given the controlled setting. However, in teleconsultation, service providers see their clients through video conferencing software utilizing Internet connections that may not be secure. These connections can be easily breached by third parties. Therefore, it is the clinician's responsibility to ensure that both

the connection and software used to connect with a client is secure and compliant with HIPAA regulations.

Solutions and recommendations for client confidentiality. To protect client confidentiality, our team first ensured that the network used was secure. This was done by using a virtual private network (VPN) during the teleconsultation sessions. A VPN is a network that utilizes existing systems of connection (e.g., Internet) to create a private connection between two networks. Within a VPN, two parties can be connected through a private line that is inaccessible to other users. This ensured that the only individuals viewing the information being transferred between the training team and the participants were the relevant parties.

In addition to the network, our team also researched several software options that had video conferencing capabilities and were HIPAA compliant. Specifically, we used Vsee; however, there are new software applications being developed as teleconsultation becomes more popular in a variety of health fields. Many of the software packages have different options and features, and require different levels of broadband and technology capabilities. As a

Table 2
Cited Behavior Analyst Certification Board Professional and Ethical Compliance Code for Behavior Analysts (2014)

Code	Title	Definition
1.02a	Boundaries of Competence	All behavior analysts provide services, teach, and conduct research only within the boundaries of their competence, defined as being commensurate with their education, training, and supervised experience.
2.04a	Third-Party Involvement Services	When behavior analysts agree to provide services to a person or entity at the request of a third party, behavior analysts clarify, to the extent feasible and at the outset of services, the nature of the relationship with each party and any potential conflicts. This clarification includes the role of the behavior analyst (such as therapist, organizational consultant, or expert witness), the probable uses of the services provided or the information obtained, and the fact that there may be limits to confidentiality.
2.05c	Rights and Prerogatives of Clients	Permission for electronic recording of interviews and service delivery sessions is secured from clients and relevant staff in all settings. Consent for different uses must be obtained specifically and separately.
2.06a	Maintaining Confidentiality	Behavior analysts have a primary obligation and take reasonable precautions to protect the confidentiality of those with whom they work or consult, recognizing that confidentiality may be established by law, organizational rules, or professional or scientific relationships.
2.07a	Maintaining Records	Behavior analysts maintain appropriate confidentiality in creating, storing, accessing, transferring, and disposing of records under their control, whether these are written, automated, electronic, or in any other medium.
3.03	Behavior-Analytic Assessment Consent	(a) Prior to conducting an assessment, behavior analysts must explain to the client the procedure(s) to be used, who will participate, and how the resulting information will be used. (b) Behavior analysts must obtain the client's written approval of the assessment procedures before implementing them.

warning, many free video conferencing software applications are not HIPAA compliant (e.g., Skype, FaceTime, Google Hangouts). Clinicians who plan on providing services via telehealth should research the various available software programs and decide what system will work best in their agency. When selecting a

software program, it is necessary to sign a Business Associates Agreement (BAA) with the video conferencing company, in which the company agrees to keep protected client information safe and secure. Most companies who offer HIPAA-secure video conferencing software are familiar with this process. For example, to ac-

Table 3
Cited Sections of the Health Insurance Portability and Accountability Act of 1996

Section	Definition
160.102	Business associate includes: (i) A Health Information Organization, E-prescribing Gateway, or other person that provides data transmission services with respect to protected health information to a covered entity and that requires access on a routine basis to such protected health information. (ii) A person that offers a personal health record to one or more individuals on behalf of a covered entity. (iii) A subcontractor that creates, receives, maintains, or transmits protected health information on behalf of the business associate.
160.103	Protected health information means individually identifiable health information: (1) Except as provided in paragraph (2) of this definition, that is: (i) Transmitted by electronic media; (ii) Maintained in electronic media; or (iii) Transmitted or maintained in any other form or medium.

cess a HIPAA-secure videoconferencing system, users need to log on from both sides (i.e., both the client and training team on site) using unique login identifiers and passwords each time they begin a session.

Electronic Data Storage and Transfer

Relevant issues. When engaging in teleconsultation, additional issues may arise with respect to the protection of stored and transferred confidential information. Transmission of data and recording of sessions in typical service delivery involves internal systems and networks. For example, if a service provider wants to record sessions in a clinic or home, video cameras are used and would then transfer data back onto an encrypted hard drive. In other words, all stored data rarely, if ever, leave the building in which they were obtained. However, with teleconsultation, data are collected, stored, and transferred through an electronic means via the Internet, introducing a potential third-party breach at each step.

Solutions and recommendations for electronic data storage and transfer. To ensure that the electronic information was protected when it was shared, our team used data storage and transfer systems that were HIPAA compliant. This meant having a cloud storage location that was password protected and that met HIPAA regulations. Cloud storage platforms are typically owned and managed by a hosting company. Thus, it was necessary to sign a BAA with the cloud storage company, in which the company agreed to keep protected client information safe and secure. (A description of what HIPAA-compliant hardware and software consist of is beyond the scope of this article, as are other considerations such as BAAs. The reader is referred to Rios et al., in press, for more information on this.)

Digital materials were also safeguarded and stored locally by keeping all materials (e.g., computers, hard drives) in locked cabinets behind locked doors. In addition, all computers and hard drives used were encrypted and password protected so that the electronic data were accessible only to assigned individuals on the team. These security precautions are the same as what would be taken if delivering services nonremotely.

Consent

Relevant issues. At least three issues of consent arise when conducting teleconsultation: (1) consent to provide services via telehealth, (2) consent to be video and audio recorded (if sessions are recorded), and (3) consent for the FBA process. In a typical service setting, client preparation for appointments is minimal. At most, they would be required to provide photo identification and an insurance card to enroll in services. However, in telehealth, the client needs not only to come to the first meeting with insurance and ID information but also to be prepared with sufficient computer, video, Internet capabilities, and the skills to operate them just to access the services. For example, imagine logging into a video conferencing website as synonymous with driving to and walking through a clinic door. All the components involved in accessing the video conferencing website are analogous to obtaining the address and directions, and being able to get transportation to a clinic. However, these prerequisite components are often difficult and unfamiliar to our clients.

Some environments present special challenges with respect to consent for video recording. In most cases, the camera system is located in a private room. However, some clinicians provide services in school settings. Thus, the camera may be set up in a classroom rather than a private room. Nonparticipating clients may walk in front of the camera and be in view of the clinicians. This issue may not be relevant just in school settings, as clinicians may deliver services to clients in group homes and other public areas. There are several different options of dealing with these and other issues.

Solutions and recommendations for consent. According to the American Telemedicine Association (ATA), a consent-like process that involves “informing and educating the patient of the nature of telemedicine service compared with in-person care,” which should “be done prior to the initiation of a telemedicine encounter” (ATA, 2014, p. 8), should be in place in which clinicians describe the nature of telehealth services and ensure understanding prior to service delivery. In our project, we conducted consent meetings over the phone with each client individually and e-mailed them

the consent documents for them to review before signing.

When working in group settings, clinicians should first send information home to the families of all clients in the setting. Then, consent could be obtained by clinicians that are on-site and who could verify the signature of all clients. If this is not feasible, the camera could be moved to a separate room, where the target client could be isolated from the others to avoid accidentally videotaping any other client. The community setting personnel should also post a sign on the door during sessions informing any and all individuals who might enter the room while video recording is occurring. This sign indicates that by entering the room while video recording is going on, an adult is providing consent to be videotaped. Although some states allow video recording in public places, consent is often legally required for audio recording.

In addition to obtaining consent for telehealth services, standard consent requirements apply for recording. For example, APA Standard 4.03 requires that clinicians obtain permission from their clients or their guardians whenever their voice and/or image is recorded (APA, 2010, p. 7). Similarly, Compliance Code 2.05c requires that permission be obtained for electronic recordings of interviews and service delivery sessions (BACB, 2014, p. 7). Further, according to state law, clinicians may be required to obtain assent. Assent is the client's agreement to participate. Just as caregivers are given the opportunity to consent to services and modality for service delivery, clients need to be given the opportunity as well. Clinicians and parents should consider the age, maturity, and overall intellectual and language functioning of the child to determine if it is appropriate.

The BACB's (2014) Compliance Code requires that behavior analysts seek their client's (or their guardian's) written approval for conducting an FBA (Section 3.03, p. 11). This requires clinicians to adequately describe the procedures involved in administering the assessment as well as to articulate any foreseeable risks (see the Beneficence and Nonmaleficence section) that the assessment might pose. This must be done using language that is accessible to the clients and their families. Consent is considered "informed" when a competent clinician is knowledgeable about the procedures used and is able to adequately communicate the

relevant information, and can answer client's questions about the process. Consent also ensures that clients and their families have an opportunity to participate in the decision-making process about the conduct of a functional analysis. This means that they are given sufficient information regarding the purpose of the procedures, a description of the procedures, and the potential risks and benefits involved in carrying out the procedures. In this sense, consent provides an additional layer of protection for the client.

Beneficence and Nonmaleficence

Relevant issues. Another ethical consideration in conducting FBAs (and, in particular, functional analyses) using remote technology is that some children referred for services exhibit severe, and sometimes dangerous, problem behaviors (e.g., physical aggression, self-injurious behavior, or property destruction). A core ethical principle guiding the practice of psychologists and behavior analysts alike involves considerations of beneficence and nonmaleficence. This principle is found in both codes of ethics (APA, 2010, Standard A, p. 3; Bailey & Burch, 2013). According to this principle, psychologists and behavior analysts are responsible for acting in the best interest of their clients and in ways that benefit their clients. At the same time, behavior analysts are expected to minimize harm to their clients.

This principle seems relatively straightforward. However, consider that during functional analyses of problem behavior, behavior analysts arrange conditions to evoke problem behavior via a series of test conditions. Furthermore, if problem behavior does occur, behavior analysts deliver putative reinforcers contingent upon the problem behavior to identify whether this increases the future probability of the occurrence of problem behavior (see Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994, for a complete description of procedures). These temporary increases in problem behavior might be viewed as harmful to the client. When conducting functional analyses using remote technology, the harm is increased because experts are providing consultation to nonexperts in the implementation of the procedures. In addition, using remote technology also introduces connectivity issues. The behavior analyst may be disconnected in the middle of an instance of a

severe problem behavior, which could cause serious harm to both the client and the individuals with the client at the remote site.

Solutions and recommendations for beneficence and nonmaleficence. Iwata et al. (1982/1994) recognized that safety precautions were an important component in the implementation of a functional analysis, in particular, with clients exhibiting severe self-injurious behaviors. In their study, several steps were taken to ensure the safety of research participants. These safety precautions can be adapted to teleconsultation. For example, when children with severe self-injurious behaviors participate in an evaluation, clinicians should first meet or obtain information from the client's physician to review the plans for the assessment and seek guidance on safety concerns. In addition, clinicians can identify nursing staff available at the client's site and have them be present during the evaluations.

In addition to getting advice from medical professionals, several researchers suggest analyzing "precursor" behaviors instead of the severe problem behavior as another way to "do no harm" during a functional analysis (Borrero & Borrero, 2008; Smith & Churchill, 2002). Severe problem behaviors are sometimes members of a larger response class that includes other, less severe topographies of problem behavior. This is an effective strategy to minimize harm, allowing clinicians to obtain the data necessary to confirm behavioral function and make adequate treatment selections through teleconsultation.

Alternative assessment methodologies are also available that allow clinicians to obtain information about behavioral function and treatment options without having to arrange conditions that evoke severe behaviors. These strategies may not be the gold standard that a functional analysis is, largely because they require additional inferences about the function of problem behavior. However, they are excellent alternatives when a functional analysis is not considered safe or feasible. One such strategy is a choice assessment in which environmental combinations are pitted against each other in a concurrent operants assessment paradigm (e.g., Harding, Wacker, Berg, Barretto, & Rankin, 2002). Harding and colleagues (2002) made inferences about the function of problem behavior by arranging choice conditions and measuring

children's engagement with stimuli and time allocation across choice conditions. Each choice condition had different available stimuli (e.g., Parent Attention + Toy vs. Alone + Toy). Results of the choice assessment successfully informed the selection of an effective intervention package to reduce the children's severe problem behaviors. This assessment methodology does not require evoking or reinforcing problem behavior and represents one alternative that can be used during teleconsultation if practitioners do not feel a functional analysis can be safely conducted using teleconsultation strategies.

Finally, clinicians can arrange procedures to plan for connection issues prior to beginning teleconsultation services. For instance, in our project, when connection was lost, procedures were immediately paused and all clinical interventions were suspended while attempts were made to establish a new connection. If a connection could not be reestablished, the clinician would terminate a session for the day. The clinicians would do this by placing a call to the parents and/or team members, letting them know to terminate the functional analysis or treatment intervention for the day and rescheduled for a different day. This information was given to the parents and/or team members prior to beginning any clinical procedure.

Training Non-BCBAs Through Teleconsultation

Relevant issues. One of the main advantages of doing teleconsultation is that services normally not available to clients living in remote areas (where experts in administering procedures, such as functional analyses, are not present) now become available. In teleconsultation, these services can be available by proxy via nonexpert professionals (e.g., social workers) carrying out those assessment and treatment procedures. Some researchers (e.g., Hanley, 2012) suggest that although it may be acceptable for behavior analysts to provide advice on how to consider possible environmental contexts and reinforcers that occasion and reinforce problem behavior, they probably should not be providing technical training to non-BCBA practitioners on how to conduct functional analyses. This is because the complexities and the skill set required for conducting an FBA, and in partic-

ular, a functional analysis, are significant. It is fair to ask the question about the ethicality of training non-BCBAs on procedures that usually require substantial training and understanding of the underlying behavioral concepts. This issue has been recognized and is addressed in ethical codes of both psychologists (APA, 2010, Standard 2.01d, p. 5) and behavior analysts (BACB, 2014, Section 2.04a, p. 7). Standard 2.01d (APA, 2010, p. 4) addresses situations in which psychologists are asked to provide services to clients for whom adequate psychological services are not available and for which the psychologist does not have adequate training. In these situations, the standard states that psychologists who have related training in the procedures the client needs are permitted to provide services, which prevents clients from being denied the necessary services (i.e., to benefit the client and simultaneously do no harm). How “related” the training must be is not specified clearly. The BACB (2014, p. 7) also address issues of training in Compliance Code 2.04a regarding consultation. It allows behavior analysts to collaborate with other non-behavior-analytic professionals to ensure clients are appropriately served. Clearly, ethical codes from both disciplines recognize the need for a balance between the psychologist’s responsibility to do “good” while doing no harm (Fisher, 2012). The notion of cooperating with other professionals is further emphasized in the psychologists’ and behavior analysts’ responsibility, when developing education and training programs, to provide appropriate knowledge and to ensure recipients receive adequate experience that meet the goals and objectives set out by the program (i.e., APA, 2010, Standard 7.01, p. 9; i.e., BACB, 2014, Section 5.04, p. 14). This means that if behavior analysts set out to train other professionals to conduct FBAs, the training program should be designed in such a way that it produces professionals who meet certain competency levels permitting them to carry out the steps involved in FBA procedures.

It has been argued that conducting FBAs require a skill set that only BCBAs have. No matter what their training, no one professional is competent to serve all types of clients. It is not unusual for professionals who have completed a training program and obtained a credential to have more experience in some areas and very little experience in others. For exam-

ple, some behavior analysts may complete their training and be more competent designing discrete trial training programs than conducting high-quality FBAs, including functional analysis, for significant problem behavior. Thus, it is important for practitioners to recognize and practice within their areas of competence (APA, 2010, Standard 2.01a, p. 4; BACB, 2014, Section 1.02a, p. 4). This means that practitioners need to identify areas where they lack competence so that additional skill development can be sought. Efforts in resolving the ethical dilemma must focus on training and, in particular, the use of training methods that have empirical evidence for their effectiveness (e.g., behavioral skills training).

Solution training non-BCBAs to through teleconsultation. Although the debate on training non-BCBAs to conduct FBAs—specifically, functional analyses—has yet to be resolved, the need for highly trained individuals to provide these assessments is of utmost importance. In our experience, at least two issues suggested that performing FBA training using teleconsultation was probably the ethical thing to do. First, when training individuals, our trainers anecdotally observed during the project that the more information provided to the non-BCBA participants, the more they tended to realize (and request) the need for additional support in conducting FBAs. That is, the more they knew about the process, the more they recognized that they did not know about the process. This was a good thing in the eyes of our trainers. If we can train others to at least recognize the complexity of skills needs to conduct a FBA, they can request assistance and additional training, rather than conducting a poor-quality FBAs. Second, teleconsultation may be a vehicle for providing support for non-BCBA practitioners that were previously unavailable (e.g., conducting functional analyses with a client). By training staff in the initial procedures of an FBA, it is possible that Hanley’s (2012) suggestion can be more easily implemented. For example, in our project, we trained participants to conduct the indirect and descriptive portions of FBAs before we consulted on the functional analysis. In the future, if those initial assessments do not produce a successful intervention, our participants now have a mechanism for requesting support, guidance, and consultation as they conduct a functional

analysis. That is, they can call on the trainers (all of whom are BCBAs) to oversee and guide the functional analysis process when necessary. Ultimately, training and consultation through telehealth allows clients who would otherwise not have received and FBA from a professional trained in FBAs to get a high-quality assessment and an effective function-based treatment plan.

Another solution in resolving this ethical issue may be found in the development of methods for evaluating professional competency in conducting FBA and treatment procedures. This could ensure that the practicing individual meets certain competency standards. Currently, the BCBA certification—and in some states, being a licensed behavior analyst—are the most widely recognized credentials that establish a minimum level of competency in the delivery of behavioral assessments and treatments. Certification or licensure may be necessary, but these credentials are not sufficient to ensure competency in FBAs. For example, even if a medical doctor degree ensures a minimum standard of competency in medicine, physicians must still seek additional experiences and obtain other credentials for their specializations. Counselors and psychologists, too, must obtain further training prior to implementing certain therapies (e.g., dialectical behavior therapy). Thus, it is not inconceivable that the future of behavior

analytic providers may incorporate additional levels of credentialing for certain behavioral assessments and procedures. Until then, those BCBAs who do not have sufficient experience in conducting FBAs should uphold their ethical obligations to their clients and not practice outside their areas of competency. When a qualified BCBA is not available to conduct a functional analysis, teleconsultation may actually serve as a potential support system that supports ethical practice, not undermine it.

Discussion

In this article, we have described some of the ethical issues that one may encounter engaging in teleconsultation, as well as recommendations to solve some of the issues (see Table 4 for a summary of the recommendations). These ethical considerations have been described throughout this paper, and the approach the authors used to solve these ethical dilemmas was described in the hopes that they are helpful to other practitioners in the field who may face similar issues. Although the technologies available today present opportunities for improved service delivery, they also create new ethical dilemmas for the field. The currently existing codes sufficiently guided practice decisions in this project. We also found it imperative to refer

Table 4
Summary of Solutions for Ethical Issues in Teleconsultation

Ethical Issue	Recommendations
Client confidentiality	Ensure the network is secure using a Virtual Private Network (VPN). Ensure video-conferencing software is compliant with the Health Insurance Portability and Accountability Act; obtain a business associates agreement (BAA).
Electronic data storage and transfer	Use password protected storage systems (e.g., cloud storage, external hard-drives). Lock up all hard copies of data.
Consent	Inform and educated clients about the nature of telehealth services prior to the start of services. Obtain consent for video recording. In group settings, obtain consent from all individuals who may be recorded during your client's services. When appropriate, obtain assent from underage clients.
Beneficence and maleficence	Ensure safety precautions are in place at the client's setting. Seek approval from medical professionals to ensure that conduction an functional analysis through teleconsultation is safe. If behavior is too dangerous to conduct a functional analysis while doing teleconsultation, seek alternative assessment methodologies.
Training non-BCBAs through teleconsultation	Consider the goal of the training or consultation, and the current skills and repertoires of the people you are training. Ensure everyone is acting within their scope of competence. Outline specific behavioral measures for competency.

to the published research in functional analysis to help guide decisions. For example, Harding et al. (2002) guided the authors how to “do no harm” when problem behavior was severe and there was a need for alternative assessment techniques. Similarly, we urge practitioners to continually contact all relevant compliance and ethics codes, local and federal regulations, as well as the extant research literature to guide their decisions as part of their practice.

Given the limited number of qualified BCBAs that exist in many states, Michigan being one of them, and the large number of clients in need of consultation with a BCBA, teleconsultation may provide one viable option for bringing high-quality, behavior analytic consultation to areas in need. Such a solution is not without its own challenges. However, the relevant codes of conduct and published literature provide guidance for those serving in the consulting role. Teams engaged in teleconsultation should likely have frequent discussion about their cases, the relevant codes of conduct, and the published literature to ensure appropriate consideration of the issues and potential solutions surrounding teleconsultation in FBA.

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