DISCUSSION AND REVIEW PAPER



Maintaining Professional Relationships in an Interdisciplinary Setting: Strategies for Navigating Nonbehavioral Treatment Recommendations for Individuals with Autism

Matthew T. Brodhead

Published online: 10 February 2015 © Association for Behavior Analysis International 2015

Abstract Due to an increase in research and clinical application of behavior analysis with individuals with autism spectrum disorder (ASD), one setting a Board Certified Behavior Analyst (BCBA) may work within is an interdisciplinary setting, where multiple disciplines collaborate to improve the outcomes of individuals with ASD. In some cases, nonbehavioral colleagues could recommend nonbehavioral treatments, setting the occasion for the BCBA to offer an alternative treatment to or question the nonbehavioral treatment. However, excessive questioning or critiques of nonbehavioral treatments by the BCBA may unintentionally erode professional relationships between the BCBA and their nonbehavioral colleagues. Because an erosion of professional relationships may occur when a BCBA questions a nonbehavioral treatment, a decision-making model for determining whether or not the proposed nonbehavioral treatment is worth addressing may be useful. The purpose of this paper is to outline such a decision-making model in order to assist the BCBA in assessing nonbehavioral treatments while maintaining an ethical balance between professional relationships and the well-being and safety of the individual with ASD. Such a model could assist the BCBA in becoming familiar with the proposed treatment, understanding the perspective of the nonbehavioral colleague and assessing the negative impacts the treatment could have on the individual with ASD. With this information, the BCBA will be in a better position to decide whether or not addressing the nonbehavioral treatment is worth the possibility of eroding a professional relationship.

M. T. Brodhead (🖂)

Keywords Ethics · Autism · Applied behavior analysis · Interdisciplinary

Introduction

Applied behavior analysis (ABA) involves the application of behavioral principles to produce socially significant behavior change (Baer et al. 1968; Cooper et al. 2007). Since the publication of the landmark study of Løvaas (1987), much applied research and application of behavioral principles has focused heavily on individuals with autism spectrum disorder (ASD; see Thompson 2014 for a summary of the history of behavior analysis and autism research). Because of the development of the Behavior Analyst Certification Board (BACB) in 1998 and interest in BACB certification, multiple graduate and undergraduate programs now provide coursework and supervision in behavior analysis, and many tailor that coursework and supervision to the application of behavioral principles to individuals with ASD. With this, Board Certified Behavior Analysts (BCBAs) or those receiving supervision from BCBAs often find themselves working side by side with other BCBAs in order to improve the outcomes of individuals with ASD.

Along with collaborations with other behavior analysts, BCBAs may often find themselves working with other professionals from other disciplines within an interdisciplinary setting. An interdisciplinary collaboration for individuals with ASD involves combining the strengths of multiple disciplines in order to maximize client outcomes. With these collaborations, BCBAs have the opportunity to work closely with speech-language pathologists, psychologists, occupational therapists, special educators, physicians, nutritionists, and others (see Cox 2012). Collaborations between BCBAs and

Department of Educational Studies, College of Education, Purdue University, West Lafayette, IN 49707, USA e-mail: mbrodhea@purdue.edu

related service providers could improve educational outcomes and increase treatment fidelity (Kelly and Tincani 2013). Specific collaborative practices include working as a team to address client goals (Cook and Friend 2010) and understanding the individual strengths each professional brings to the interdisciplinary team (Dallmer 2004). As a result, clients who attend a collaborative interdisciplinary setting would have the opportunity to receive well-rounded services that best meet their individual needs.

Aside from the benefits a client could receive through interdisciplinary services, the interdisciplinary setting also provides an opportunity for BCBAs to promote the field of ABA to other members of the interdisciplinary team through their professional interactions. Desirable professional interactions include maintaining respect for other disciplines, understanding the perspective those disciplines are taking, and appreciating the science that supports those disciplines. Professional interactions will likely increase the probability that BCBAs will earn the trust and partnerships of other members of the interdisciplinary team. Professional interactions may also increase the probability that other disciplines will recognize the field of ABA as one that is collaborative.

Though collaborative skills in an interdisciplinary setting may greatly enhance the quality of services the BCBA provides, they are rarely addressed in applied behavior analysis preservice and in-service training (Kelly and Tincani 2013). Therefore, it is possible that behavior analysts may not have the appropriate skills to work with colleagues to maximize client outcomes in some cases. One example of a potentially noncollaborative practice is questioning or offering an alternative to a proposed nonbehavioral treatment. Given that the Guidelines for Responsible Conduct for Behavior Analysts of BACB (2010), hereafter referred to as the BACB Guidelines, 9.01 states that "The behavior analyst should promote the application of behavior principles in society by presenting a behavioral alternative to other procedures or methods," BCBAs in an interdisciplinary setting may feel ethically obligated to promote the field of ABA by offering an alternative to or questioning a nonbehavioral treatment. Offering an alternative treatment to or questioning a nonbehavioral treatment could suggest to other members of the interdisciplinary team that the BCBA may not be a collaborative partner. This questioning would possibly result in an erosion of professional relationships and reduce the willingness of other members of the interdisciplinary team to collaborate with the BCBA. In some cases, excessive questioning or poor collaborative skills may ultimately result in withdrawal of the BCBA's invitation to participate in clinical activities.

Consider one recent example where a BCBA was asked to collaborate with a group of professionals who were meeting to improve a student with ASD's public school program. The group of professionals included the BCBA, a classroom teacher, a speech-language pathologist, and an occupational therapist. All of the professionals attended the student's Individualized Education Program (IEP) meeting, and during that meeting, an animal-assisted intervention was suggested for social skill development. When this recommendation was made, the BCBA aggressively questioned the proposed treatment before becoming familiar with and appraising the treatment. As a result, the BCBA angered other members of the interdisciplinary team, and the BCBA's invitation to attend subsequent meetings was revoked.

In another example, a BCBA was working with an interdisciplinary team that provided behavioral services to children with ASD. During the first month of clinical meetings, the BCBA frequently questioned the treatment recommendations of other nonbehavioral members of the team. The BCBA asked questions such as "What data support that treatment?" and "How about I offer up another way to do that?" This questioning became so problematic that other members of the company refused to work with the BCBA because of the BCBA's failure to take the perspective of other disciplines and collaborate with nonbehavioral professionals.

The above cases highlight recent instances where a BCBA's questioning of nonbehavioral treatments resulted in an erosion of professional relationships in an interdisciplinary setting. Though these interactions likely do not represent the majority of BCBAs, it is possible that, with more information about the proposed nonbehavioral treatments and careful consideration of the perspective the nonbehavioral colleagues, the BCBAs may have chosen not to question the treatment recommendations of their nonbehavioral colleagues. Given that BACB Guideline 1.0 states that "The behavior analyst maintains the high standards of professional behavior of the professional organization" (2010), it may be important for BCBAs to have a systematic strategy when faced with a nonbehavioral treatment recommendation in order to maintain high standards of professional behavior.

Of course, not all nonbehavioral treatments for individuals with ASD are created equal. For example, BCBA's concerns about animal-assisted therapy could be unnecessary or unwarranted if the time and financial costs do not negatively impact other aspects of the client's treatment. However, other treatments, such as chelation therapy, that are known to be ineffective, costly, and/or potentially dangerous certainly warrant caution from the BCBA. In other cases, the effects of nonbehavioral treatments will be unclear, with relative benefits and drawbacks that need to be weighted given the needs of the client, the resources of the caretakers, and interdisciplinary team, and, most importantly, client safety.

Because collaborations amongst team members can improve consumer outcomes of individuals with disabilities (see Hunt et al. 2003), guidelines for navigating nonbehavioral treatments may be useful. Guidelines would likely help BCBAs systematically address nonbehavioral treatments while simultaneously maintain relationships with professionals from other disciplines. Maintaining professional relationships could allow for continued involvement from the BCBA and therefore increase the probability of a client's continued access to behavioral services. Maintaining professional relationships may also continue to promote of the field of ABA and to support the ethical and professional behaviors of BCBAs. Finally, there is a growing interest in additional professional resources for practitioners that address common issues in practice. This interest is evidenced by recently published papers on professionalism and ethical behavior (e.g., Brodhead and Higbee 2012; O'Leary et al. 2015) and clinical decision making (e.g., Geiger et al. 2010; Tiger et al. 2008). Because of this interest, a decision-making model for navigating nonbehavioral treatments and maintaining professional relationships may be a useful contribution to the scholarly literature.

The goal of this paper is to describe a preliminary decisionmaking model to help BCBAs problem-solve the ethical dilemma that may arise when a nonbehavioral treatment is proposed by a nonbehavioral colleague. Though new BCBAs or Board Certified Assistant Behavior Analysts are likely to benefit the most from this proposed decision-making model, individuals supervising BCBAs (such as clinical directors and university faculty) may also benefit from this model as well.

Guidelines for Assessing Nonbehavioral Treatments

Model Development and Assumptions

The following decision-making model outlines one possible way for assessing nonbehavioral treatments by advocating for client safety, becoming familiar with the treatment, taking the perspective of the nonbehavioral colleague, and analyzing the treatment's potential negative impacts to the client. The model is based on the author's personal values that focus on building a cohesive network of interdisciplinary treatment to best meet the needs of the individual with ASD. After the initial model was developed, the author sought feedback from behavior analysts, speech-language pathologists, and school psychologists all with extensive experiences working in interdisciplinary teams. The proposed model was then presented at an annual conference of over 80 professionals. Feedback was solicited from professionals at that conference and subsequently integrated into the model.

When using this decision-making model, at least four assumptions should be made. First, this model assumes that a nonbehavioral colleague has proposed a nonbehavioral treatment. This model does not address how to discuss questionable treatments suggested by behavioral colleagues. Though this discussion would likely be useful, it is beyond the scope of this paper. Second, the BCBA should be adequately trained, or under adequate supervision, to provide services with an interdisciplinary team. If the BCBA is not adequately trained, he or she should seek supervision or make an appropriate referral (though appropriate collaborative skills for BCBAs are not well understood, see Kelly and Tincani 2013, for more information about the collaborative practices in which BCBAs report engaging in). Third, it assumes that the BCBA has a role in the interdisciplinary team that affords them the opportunity to evaluate and possibly comment on the nonbehavioral treatment. The nature of involvement of the BCBA in the interdisciplinary team could range from limited term consultation to full-time involvement. Therefore, before using the model, BCBAs may consider whether or not they are in a professional position to evaluate the proposed nonbehavioral treatment. Finally, it should be assumed that consent has been provided for the nonbehavioral treatment that the BCBA is analyzing. If consent has not been obtained, the BCBA's first point of action would be to make sure it is obtained.

Identification of a Nonbehavioral Treatment

The first step in this decision-making model is the identification of a nonbehavioral treatment (see Fig. 1). A nonbehavioral treatment can generally be defined as any treatment outside of the scope of traditional behavior-analytic practice. In some cases, the treatment may have an unfamiliar name, or the procedures may not seem behavior-analytic in nature. It is also possible that the targeted outcomes and measurement systems may not be familiar to the BCBA. The treatment may also appeal to hypothetical constructs (e.g., the mind or states of emotion), or it may be recommended to address causal agents that are not related to the client's environment.

Once a nonbehavioral treatment has been identified, it is recommended that the BCBA proceeds to the next step in the decision-making model. If the BCBA is unsure about whether or not the proposed treatment is nonbehavioral, it is recommended that he or she still proceeds to the next step.

Is Client Safety at Risk?

After the nonbehavioral treatment is identified, it is important to ask whether or not client safety is at risk. Risks to client safety can be defined as any treatment that will likely cause short- or long-term psychological or physical harm to the client. For example, chelation therapy poses a risk to client safety because it has been linked to the death of at least one individual with ASD (Kane 2006). Facilitated communication is another example of a treatment that poses a risk to client safety because it claims to produce gains in language skills, though research has unequivocally shown it does not (Mostert 2001; Schlosser et al. 2014). Given the intensive time and resources

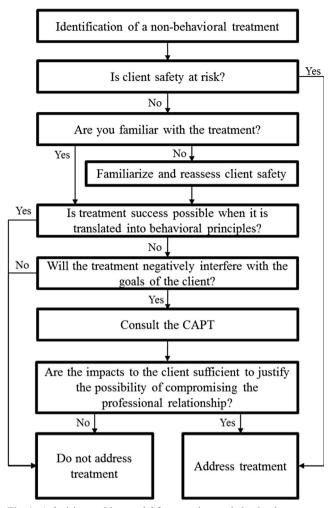


Fig. 1 A decision-making model for assessing nonbehavioral treatments

necessary to implement facilitated communication, this treatment is likely to cause psychological harm in the form of limiting the client's access services that have a strong research foundation. Finally, the inappropriate application of aversive stimuli (e.g., using electric shock prior to implementing function-based treatment) serves as another example of posing risk to the client.

The above list of treatments that pose a risk to client safety is far from complete. If the BCBA determines that the proposed nonbehavioral treatment poses a risk to client safety, it is recommended that he or she address the proposed treatment with their nonbehavioral colleague. This step is in place to ensure that safety of the client remains a primary focus of interdisciplinary service delivery. If the BCBA is unsure about whether or not the proposed treatment poses a risk to client safety, it is recommended that he or she consults with another professional. If the BCBA determines that the proposed nonbehavioral treatment does not pose a risk to client safety, it is recommended that he or she proceeds to the next step in the decision-making model, becoming familiar with the treatment. Are You Familiar with the Treatment?

The next step in the decision-making model is for the BCBA to ask, "Am I familiar with the proposed nonbehavioral treatment?" In the case of becoming familiar with the proposed nonbehavioral treatment, the BCBA should remain skeptical about the proposed treatment until he or she has gathered adequate evidence about that treatment. Being a skeptic of a nonbehavioral treatment does not mean the BCBA should discount that treatment. Instead, a skeptical approach to alternative treatments is meant to assess the validity of the treatment recommendation based on all available evidence (Normand 2008). Because skeptical appraisal involves gathering all available evidence, the BCBA's familiarity with the nonbehavioral treatment should go beyond that of initial understanding. Given that BACB Guideline 2.10c states that "Behavior analysts are responsible for review and appraisal of likely effects of all alternative treatments, including those provided by other disciplines" (BACB 2010), BCBAs should have the skills to conduct the research that is necessary to adequately understand the proposed nonbehavioral treatment. Therefore, skeptical appraisal of a nonbehavioral treatment is recommended before a behavior analyst makes a recommendation for or against that treatment.

To become familiar with the treatment, the BCBA should conduct a literature review of seminal research on the proposed nonbehavioral treatment. The BCBA should also search for literature that has empirically tested the efficacy of nonbehavioral treatments on individuals with developmental disabilities. For example, Quigley et al. (2011) evaluated the effects of a weighted vest on problem behavior, and Chok et al. (2010) evaluated the effects of an ambient prism lens on cognition and motor skills. This growing body of research will likely be of great use for the BCBA in their appraisal of a nonbehavioral treatment. If the BCBA has limited access to scholarly journals, he or she may visit the Association for Science in Autism Treatment Web site (asatonline.org) to learn more about the proposed nonbehavioral treatment. Another strategy may be for the BCBA to consult with another professional from the same field of the nonbehavioral colleague. For example, if an occupational therapist recommended access to toys that provide tactile stimulation at the onset of challenging behavior, the BCBA could contact another occupational therapist with whom he or she has a professional relationship with and seek guidance from that professional. Seeking guidance from another professional would allow the BCBA to ask specific questions about the treatment without the possibility of compromising his or her relationship with the professional who recommended that treatment. During this interaction, however, it will be important for the BCBA to maintain client confidentiality.

It may be helpful for the BCBA to explore research that is not traditionally published in behavior-analytic journals. Though behavior analysis has a rich history of systematically analyzing human behavior, other disciplines may have scientifically sound procedures to add to the understanding of ASD treatment. These differences include the use of different research designs (e.g., group design) and/or different measures of treatment success (e.g., statistical significance). Therefore, BCBAs may wish to continue to remain open-minded about treatments supported by research methodology not commonly used in behavior analysis.

Another purpose of becoming familiar with the proposed nonbehavioral treatment is to begin to understand the perspective the nonbehavioral colleague is taking. It is possible, even likely, that other disciplines have values that are different than those held by the BCBA. By understanding the perspective of other disciplines, it is recommended that the BCBA analyzes how those perspectives may lead to the recommendation of the nonbehavioral treatment. It may also be useful for the BCBA to take the perspective of the nonbehavioral colleague to see how the proposed nonbehavioral treatment could serve as an appropriate contribution to interdisciplinary service delivery. By understanding the perspective of the nonbehavioral colleague, and the research that supports the proposed nonbehavioral treatment, the BCBA will likely then be in a position to translate the proposed treatment into behavioral principles and to more accurately judge its potential efficacy.

Revisit Client Safety

After the BCBA becomes familiar with the proposed nonbehavioral treatment, it is recommended that the BCBA reconsiders whether or not client safety is at risk. It is possible that becoming familiar with a treatment may uncover possible harmful side effects of that treatment, and therefore merits discussion with the nonbehavioral colleague. If the BCBA determines client safety is at risk, then it is recommended that he or she addresses the proposed treatment with the nonbehavioral colleague. If the BCBA determines client safety is still not at risk, then it is recommended that he or she advances to the next step in the decision-making model.

Is Treatment Success Possible When the Nonbehavioral Treatment is Translated into Behavioral Principles?

The next step in the proposed decision-making model is to ask whether or not treatment success is possible when the proposed nonbehavioral treatment is translated into behavioral principles. Given that the BACB Guidelines assume BCBAs should be able to appraise treatments proposed by nonbehavioral colleagues, the BCBA should be capable of translating a treatment into behavior-analytic terminology. However, BCBAs in training and/or frontline employees may need to seek the expertise of a BCBA when translating the proposed nonbehavioral treatment into behavioral principles.

Though each proposed nonbehavioral treatment will be unique to the context in which it is recommended, the following examples serve as a starting point for how a translation could occur. In one example, to treat stereotypy, an occupational therapist may recommend access to tactile stimulation prior to a student beginning his or her academic programming. In this case, it is possible that the proposed nonbehavioral treatment may be translated into an antecedent strategy that serves as an abolishing operation for self-stimulatory behavior. In another example, psychologist may recommend the presence of therapy animals to improve social interactions. Though a BCBA may be more likely to contrive situations to reinforce appropriate social behaviors, the BCBA could consider the possibility of animals serving as discriminative stimuli for social interactions. Emerging research in the area of human-animal interactions indicates that children with ASD engage in more social interactions when animals are present than when they are not (see O'Haire et al. 2013), so this translation may be at least somewhat accurate. In a final example, a nutritionist may recommend changes to an individual with ASD's diet to reduce challenging behavior and improve attending during class. With this recommendation, it is possible that changes in the diet could remove aversive stimuli (e.g., bodily discomfort) that, in the past, are likely to occasion challenging behavior. Due to a decrease in discomfort, it may be more likely that the individual with ASD will attend to classroom instruction.

The above examples provide insight on how a BCBA could translate nonbehavioral treatments into behavioral principles. After a translation occurs, the BCBA will be in a better position to adequately assess whether or not the treatment is likely to be effective in its proposed context. Other disciplines will likely use different terminology and have different conceptualizations of causal agents. However, their concepts and principles may actually translate into effective behavioral practice (see Slocum and Butterfield 1994, for an example, of how terms used by cognitive psychologists may translate into behavioral principles).

If the BCBA determines that the treatment may be successful when translated into behavioral principles, then it is recommended that no more action is taken. In this case, the BCBA has increased their familiarity with a nonbehavioral treatment. By not addressing the nonbehavioral treatment with their nonbehavioral colleague, the BCBA has also avoided a situation where questioning a proposed treatment may have resulted in an erosion of the professional relationship. This would have been particularly harmful for the BCBA, considering that the treatment would have likely been effective. If the BCBA determines that the treatment will likely not be successful when translated into behavioral principles, it is recommended that the BCBA asks whether or not the treatment will negatively interfere with the goals of the client. Will the Treatment Negatively Interfere with the Goals of the Client?

If the BCBA determines that the proposed nonbehavioral treatment will likely not be successful when translated into behavioral principles, the next step is to ask whether or not the proposed treatment negatively interferes with the goals of the client. This is an important consideration, not only out of respect for the client and his or her stakeholders, but also because "the behavior analyst has a responsibility to operate in the best interest of the client" (BACB Guideline 2.0). Because of this guideline, the BCBA considers supporting the nonbehavioral treatment. Although the treatment may not be effective when translated into behavioral principles, the treatment recommendation may still operate in the best interest of the client. If the proposed nonbehavioral treatment does not interfere with the goals of the client, then it is recommended that no action is taken.

On the other hand, the BCBA will be ethically inclined to raise an issue of concern with the nonbehavioral colleague if the treatment does interfere with the goals of the client. Consider an example where a recommendation is made to use a voice output device to improve communication, and the client's team has decided that vocalizations will be the targeted form of language acquisition. This may interfere with the goals of the client. In another example, if the client's team recommended for full inclusion in a public school setting, and a member of the interdisciplinary team recommended the client has limited interaction with typically developing peers, this may interfere with the client's goals. If the proposed nonbehavioral treatment does interfere with the goals of the client, it is recommended that the BCBA assesses the extent to which it interferes before deciding to address the treatment with the nonbehavioral colleague.

Consult the Checklist for Analyzing Proposed Treatments

Though a nonbehavioral treatment may interfere with the goals of the client, the extent to which it will interfere will likely vary from treatment to treatment. Therefore, treatments that have minimal interference may not be worth addressing with a nonbehavioral colleague, especially if addressing the nonbehavioral treatment could jeopardize the professional relationship. On the other hand, a nonbehavioral treatment that significantly interferes with the goals of the client will be worth addressing with the nonbehavioral colleague.

One method of systematic evaluation may be the *Checklist* for Analyzing Proposed Treatments (CAPT; see Table 1). The CAPT outlines six domains: function-based treatment, skill acquisition, social outcomes, data collection, treatment integrity, and social validity. Each domain contains possible treatment components with an opportunity to select the probability of those components occurring within the nonbehavioral treatment. Specifically, a BCBA using the CAPT would indicate whether each component has a low, medium, or high probability of occurring (or if the component was not applicable [NA]). The BCBA may also consider adding additional components or domains that represent their own personal values.

With all applicable components in the first six domains scored, the BCBA would then score the components in the final domain: resources. By considering the resources at the disposal of the client, treatment team and/or stakeholders, the BCBA will likely be in a better position to consider the overall negative impact of the treatment. Consider a hypothetical example where a BCBA uses the CAPT to determine the extent of negative impacts of equine therapy. Though most components were marked "low" (as in having a low probability of occurring), the caretakers/treatment team had considerable financial and time resources. Therefore, it is possible the treatment will minimally interfere with the goals of the client. On the other hand, if the family had limited financial resources and limited time, then the proposed nonbehavioral treatment will likely to interfere with the goals of the client. It is worth noting that some categories could be weighted differently, depending on the needs of the client. For example, if challenging behavior is the single barrier to a client's inclusion in an educational setting, categories related to functional assessment and treatment of challenging behavior may be weighed more strongly.

Once the BCBA scores the CAPT, the BCBA should be able to put the relative negative impacts of the treatment into perspective. Though the purpose of the CAPT is not to be a standardized metric of appraising nonbehavioral treatments, it could serve the purpose of providing a starting point for conducting such an analysis. The CAPT may also serve to assure the BCBA that the proposed nonbehavioral treatment does not have a significant negative impact on the client's goals. On the other hand, the CAPT could also provide insight that the proposed treatment will likely have enough of a negative impact to justify raising concern for the proposed nonbehavioral treatment with the nonbehavioral colleague.

Are the Impacts to the Client Sufficient to Justify the Possibility of Compromising the Professional Relationship?

The completion of the CAPT will provide an opportunity for the BCBA to appropriately judge the negative impacts of the nonbehavioral treatment. Using this information, the BCBA will be in a position to adequately assess whether or not it is worth raising an issue of concern with the nonbehavioral colleague who recommended the nonbehavioral treatment. As mentioned previously, the BCBA has an ethical obligation to promote the application of behavior analysis and provide alternatives to nonbehavioral treatments. However, such advocacy may erode professional relationships between the BCBA
 Table 1
 Checklist for analyzing proposed treatments

| t for analyzing ts | Domain and category | Probability |
|-----------------------|---|--------------------|
| | (1) Function-based treatment | |
| | Treatment addresses the function of behavior | Low/medium/high/NA |
| | Treatment will not increase challenging behavior | Low/medium/high/NA |
| | Treatment will result in the acquisition of an alternative replacement behavior | Low/medium/high/NA |
| | (2) Skill acquisition | |
| | Treatment will result in acquisition of functional skills | Low/medium/high/NA |
| | Treatment does not increase inappropriate behaviors | Low/medium/high/NA |
| | Treatment does not negatively affect other acquired skills | Low/medium/high/NA |
| | (3) Social outcomes | |
| | Treatment promotes inclusion into social situations | Low/medium/high/NA |
| | Treatment results in the acquisition of socially appropriate skills | Low/medium/high/NA |
| | (4) Data collection | |
| | Data will be collected | Low/medium/high/NA |
| | Data collection captures target behavior(s) of interest | Low/medium/high/NA |
| | Data collection will capture treatment efficacy | Low/medium/high/NA |
| | (5) Treatment integrity | |
| | Stakeholders can be trained to implement the treatment | Low/medium/high/NA |
| | Treatment is likely to be implemented consistently | Low/medium/high/NA |
| | (6) Social validity | |
| | Treatment corresponds with the short-term goals of the stakeholders | Low/medium/high/NA |
| | Treatment corresponds with the long-term goals of the stakeholders | Low/medium/high/NA |
| | The client will favor treatment | Low/medium/high/NA |
| | The form of reinforcement is appropriate | Low/medium/high/NA |
| | The targeted outcomes are socially acceptable | Low/medium/high/NA |
| | (7) Resources | |
| ay be weighted | Treatment does not require significant financial resources | Low/medium/high/NA |
| ing on the | Treatment does not require significant time resources | Low/medium/high/NA |

Note: outcomes may be weighted differently depending on the needs of the client

and other members of the interdisciplinary team. This erosion may not be in the best interest of the client, another ethical obligation BCBAs are expected to maintain.

This section is likely the most difficult point in the decision-making model. However, the previous steps in the proposed model hopefully provide a context in which the BCBA can better understand the science behind the nonbehavioral treatment, the perspective of the nonbehavioral colleague, the proposed nonbehavioral treatment's ability to translate into behavior-analytic terminology, and the extent to which the treatment negatively impacts the goals of the client. If the BCBA determines the matter is worth addressing, he or she will come to that decision in a systematic format. Coming to a decision to question a nonbehavioral treatment in a systematic format would increase the probability that the BCBA has acted in the best interest of the client by considering all of the relevant scientific and clinical information available, along with the perspective of the nonbehavioral colleague. In summary, if it is determined that the negative impacts to the client's goals are sufficient to justify the possibility of eroding a professional relationship with a nonbehavioral colleague, it is recommended that the BCBA addresses the treatment.

If the BCBA determines the proposed nonbehavioral treatment does not have enough negative impact on the client's goals to merit discussion with the nonbehavioral colleague, then it is recommended that no further action is taken. By not questioning the proposed nonbehavioral treatment, the BCBA may be in a better position to address a future recommendation that does significantly interfere with the client's goals. Also, coming to the decision to not address a nonbehavioral treatment in a systematic way may also increase the likelihood that the BCBA has acted in the best interest of the client, again by considering the relevant scientific and clinical information available in the context and perspective in which the nonbehavioral treatment was recommended.

Discussion

The above decision-making model represents one strategy a BCBA may take when deciding whether or not to address a nonbehavioral colleague's treatment recommendation. The proposed model also provides a starting point for a systematic framework of inquiry of alternative treatments to behavioral interventions for individuals with ASD. The decision-making model also provides an antecedent strategy to help BCBAs promote the field of ABA as one that is professional.

Though this model provides a strategy for systematically analyzing a proposed nonbehavioral treatment, it is not meant to dramatize every instance of treatment recommendation made by a nonbehavioral colleague. That is, not every nonbehavioral treatment should be cause for alarm. However, a systematic framework for evaluating nonbehavioral treatments could be useful for BCBAs who work in interdisciplinary settings.

Because this decision-making model has not been systematically evaluated, it is unclear whether or not it will increase the probability of a BCBA maintaining professional relationships with nonbehavioral colleagues. Deciding whether or not to question a proposed nonbehavioral treatment is likely a small portion of a BCBA's role in an interdisciplinary setting. Therefore, it is unclear whether or not this proposed model will have a noticeable impact on professional behavior and interactions.

One way to evaluate the potential effectiveness of the proposed model of decision-making and the professional behaviors of the BCBA is to administer a social validity survey to colleagues on the interdisciplinary team. The social validity survey should ask questions about the quality and appropriateness of the BCBA's professional interactions. Completed surveys may be anonymously returned to the BCBA's supervisor, or directly to the BCBA, in order to ensure feedback is provided and future performance goals are established. Ultimately, feedback from the social validity surveys will help to further enhance the BCBA's professionalism skills with the interdisciplinary team. See Brodhead and Higbee (2012) for additional strategies for supervising professional behavior of BCBAs.

Because this proposed decision-making model represents the values of the author, it is likely there are other courses of action BCBAs could take when faced with a nonbehavioral treatment. One purpose of this model is to provide a preliminary framework for how a BCBA can navigate such a problem. With this information, BCBAs may be in a better position to refine the proposed model, or develop similar models that better meet their needs.

It is also worth noting that the purpose of this paper is not to promote the use of treatments for ASD that are not supported by a sufficient body of scientific literature. As noted in the BACB Guidelines, BCBAs are ethically obligated to promote the science of behavior analysis and operate in the best interests of the clients. At times, this may very well mean that BCBAs will need to take measures of advocacy against the application of an inappropriate nonbehavioral treatment. However, it is recommended that this advocacy is only conducted after thorough appraisal of the nonbehavioral treatment, as described above.

In practice, this decision-making model could be adopted to meet the needs of the individual BCBA, a group of BCBAs, or an agency, so long as the goal of maintaining professional relationships with nonbehavioral colleagues is met. Also, this model could be useful for BCBAs who do not typically interact with nonbehavioral professionals, but who are called to attend an interdisciplinary meeting, such as an IEP or Person-Centered Planning meeting. Finally, this proposed decision-making model may be useful for newly certified BCBAs, those seeking certification from the BACB, or those in supervisory roles. As more and more BCBAs are entering the workforce, it may be increasingly important to provide systematic training and supervision on professional interactions with nonbehavioral colleagues. Finally, this decisionmaking model hopefully provides a framework for emphasizing the importance of adequately reviewing the literature supporting nonbehavioral treatments and taking the perspective of nonbehavioral colleagues while promoting the safety and well-being of individuals with ASD receiving interdisciplinary treatment.

References

- Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1, 91–97. doi:10.1901/jaba. 1968.1-91.
- Behavior Analyst Certification Board (BACB). (2010). Behavior Analyst Certification Board guidelines for responsible conduct for behavior analysts. http://www.bacb.com/ Downloadfiles/BACBguidelines/BACB_Conduct_Guidelines. pdf. Accessed July 2014.
- Brodhead, M. T., & Higbee, T. S. (2012). Teaching and maintaining ethical behavior in a professional organization. *Behavior Analysis* in *Practice*, 5, 82–88.
- Chok, J. T., Reed, D. D., Kennedy, A., & Bird, F. L. (2010). A single-case experimental analysis of the effects of ambient prism lenses for an adolescent with developmental disabilities. *Behavior Analysis in Practice*, 3, 42–51.
- Cook, L., & Friend, M. (2010). The state of the art of collaboration on behalf of students with disabilities. *Journal of Educational and Psychological Consultation*, 20, 1–8. doi:10.1080/ 10474410903535398.
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). Applied behavior analysis. New Jersey: Person Education.
- Cox, D. J. (2012). From interdisciplinary to integrated care of the child with autism: the essential role for a code of ethics. *Journal of Autism* and Developmental Disabilities, 42, 2729–2738. doi:10.1007/ s10803-012-1530-z.
- Dallmer, D. (2004). Collaborative relationships in teacher education: A personal narrative of conflicting roles. *Curriculum Inquiry*, 34, 29– 45. doi:10.1111/j.1467-873X.2004.00279.x.

- Geiger, K. B., Carr, J. E., & LeBlanc, L. A. (2010). Function-based treatments for escape-maintained problem behavior: A treatmentselection model for practicing behavior analysts. *Behavior Analysis in Practice*, 3, 22–32.
- Hunt, P., Soto, G., Maier, J., & Doering, K. (2003). Collaborative teaming to support students at risk and students with severe disabilities in general education classrooms. *Exceptional Children*, 69, 315–332. doi:10.1177/001440290306900304.
- Kane, K. (2006). Death of 5-year-old boy linked to controversial chelation therapy. Pittsburgh Post Gazette. Accessed July 14, 2014.
- Kelly, A., & Tincani, M. (2013). Collaborative training and practice among applied behavior analysts who support individuals with autism spectrum disorder. *Education and Training in Autism and Developmental Disabilities*, 48, 120–131.
- Løvaas, O. I. (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology*, 55, 3–9.
- Mostert, M. P. (2001). Facilitated communication since 1995: A review of published studies. *Journal of Autism and Developmental Disorders*, 31, 287–313. doi:10.1023/A:1010795219886.
- Normand, M. P. (2008). Science, skepticism, and applied behavior analysis. *Behavior Analysis in Practice*, 1, 42–49.
- O'Haire, M. E., McKenzie, S. J., Beck, A. M., & Slaughter, V. (2013). Social behaviors increase in children with autism in the presence of

animals compared to toys. *PLoS ONE*, *8*, e57010. doi:10.1371/journal.pone.0057010.

- O'Leary, P. N., Miller, M. M., Olive, M. L., & Kelly, A. N. (2015). Blurred lines: Ethical implications of social media for behavior analysts. *Behavior Analysis in Practice*. doi:10.1007/s40617-014-0033-0.
- Quigley, S. P., Peterson, L., Frieder, J. E., & Peterson, S. (2011). Effects of a weighted best on problem behaviors during functional analyses in children with pervasive developmental disorders. *Research in Autism Spectrum Disorders*, 5, 529–538. doi:10.1016/j.rasd.2010. 06.019.
- Schlosser, R. W., Balandin, S., Hemsley, B., Iacono, T., Probst, P., & von Tetzchner, S. (2014). Facilitated communication and authorship: A systematic review. *Augmentative and Alternative Communication*, 30, 359–368. doi:10.3109/07434618.2014.971490.
- Slocum, T. A., & Butterfield, E. C. (1994). Bridging the schism between behavioral and cognitive analyses. *The Behavior Analyst*, 17, 59–73.
- Thompson, T. (2014). Autism and behavior analysis. In F. K. McSweeney & E. S. Murphy (Eds.), *The Wiley Blackwell handbook of operant* and classical conditioning. Oxford: Wiley. doi:10.1002/ 9781118468135.ch19.
- Tiger, J. H., Hanley, G. P., & Bruzek, J. (2008). Functional communication training: A review and practical guide. *Behavior Analysis in Practice*, 1, 16–23.