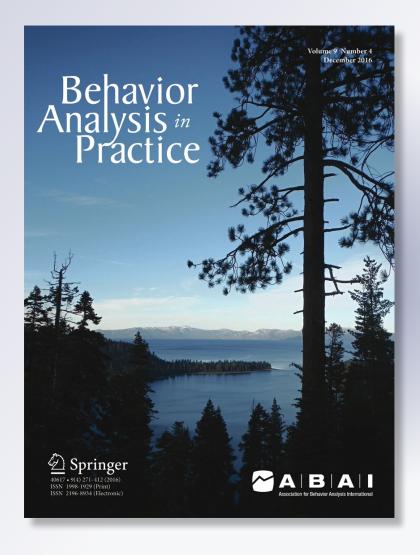
# Recommended Practices for Individual Supervision of Aspiring Behavior Analysts

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#### SPECIAL SECTION: SUPERVISION PRACTICES

## Recommended Practices for Individual Supervision of Aspiring Behavior Analysts

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**Abstract** Practicing behavior analysts and behavior analysts in academic settings often provide supervision for young professionals who are pursuing certification as a behavior analyst. Effective supervision is critical to the quality of ongoing behavioral services, the professional development of the supervisee, the continued growth of the supervisor, and the overall development of our field and its practice. The Behavior Analyst Certification Board recently instituted several new requirements including training in supervisory practices prior to supervising those who are accruing hours toward the experience requirement for certification. However, few published resources exist to guide supervisor activities and recommended practice. The paper summarizes five overarching recommended practices for supervision. For each practice, detailed strategies and resources for structuring the supervisory experience are provided.

 $\begin{tabular}{ll} \textbf{Keywords} & \textbf{Certification} \cdot \textbf{Fieldwork experience} \cdot \textbf{Individual} \\ \textbf{supervision} \cdot \textbf{Mentoring} \cdot \textbf{Practicum} \cdot \textbf{Supervision} \\ \end{tabular}$ 

The field of applied behavior analysis (ABA) has a rich literature base on effectively teaching new practitioners discrete skills, such as conducting functional analyses (FAs) of problem behavior and interpreting the results (Chok, Shlesinger, Studer, & Bird, 2012) and using effective instructional

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Trumpet Behavioral Health, 390 Union Blvd., Suite 300, Lakewood, CO 80228, USA practices during both discrete trial and incidental teaching formats (Lerman, Vorndran, Addison, & Kuhn, 2004). Much of these training efforts are accomplished through the use of behavioral skills training (BST) which consists of four components—instructions, modeling, rehearsal, and feedback (Miltenberger, 2003). Practitioners can access synthesized guides, like the recent publication by Parsons, Rollyson, and Reid (2012) outlining evidence-based staff training strategies and practice considerations in implementing those staff training strategies. Although there is a large body of literature regarding how to teach behavior analysts new specific skills, there is a paucity of research and few practice guidelines to inform effective overall supervision practices.

In the past 5 years, the number of individuals pursuing certification through the Behavior Analyst Certification Board® (BACB®) as Board Certified Behavior Analysts® (BCBAs®) and Board Certified Assistant Behavior Analysts® (BCaBAs®) has substantially increased (Carr 2015). This rapid rise in individuals seeking training and pursuing certification is likely due to multiple factors. For example, one factor contributing to the rise is the increasing demand for intervention services as many states mandate managed care coverage for ABA services for individuals diagnosed with autism. In addition, many public schools are increasing the credentialing requirements for those providing services for individuals with disabilities.

The BACB has clearly established requirements for eligibility to sit for the exam, as well as the requirements of those behavior analysts wishing to provide supervision (Behavior Analyst Certification Board, 2015a, b). Despite clear requirements about eligibility from the BACB, the specific activities used to mentor and teach supervisees are determined by individual BCBA supervisors (Behavior Analyst Certification Board, 2015a). That is, the specific content and strategies employed during supervision are not directly dictated by the

BACB. Many behavior analysts may have never received explicit instruction or guidance on how to be an effective supervisor or on the critical nature the role of supervisor plays in the shaping of professionals in a field. Since many established behavior analysts never received explicit training in supervising others as part of their graduate education, most of us have likely had at least some non-optimal experiences with a supervisor and we must strive to behave differently with our supervisees. Bailey and Burch (2010) encourage us to "try to be the supervisor you always wanted but never had" (p.93).

Perhaps in response to the lack of explicit instruction and non-optimal supervisory practices, the BACB created a Supervision Task Force, resulting in several changes to the supervision and experience requirements (BACB, 2012). The BACB added eligibility requirements for BCBAs to provide the required supervision to those pursuing certification or to practicing BCaBAs. Before BCBAs can provide supervision, they must complete an 8-h competency-based training covering effective supervision following the curriculum guidelines set forth by the BACB. In addition, those pursuing certification and those BCBAs who would like to provide supervision must complete the BACB's online supervision and experience training module, which describes the specific guidelines and logistics for supervision and experience hour accrual. Finally, for all BCBAs who wish to provide supervision, the BACB added the specification that certificants must complete 3 h of supervision continuing education as part of the total required 32 h within each 2-year recertification cycle.

Due to the new criteria established by the BACB, we have the structure to ensure that our time in supervision is more likely to be productive and effective. This structure also facilitates the development of future behavior analysts who are competent, confident, effective with consumers, and who consistently engage in ethical and responsible practice. However, there is still a personal commitment on the part of the supervising BCBA to ensure these resources are used to their fullest potential and that the supervision experience is substantial and high quality. There are some resources to guide effective supervision of direct clinical service delivery and procedural implementation (e.g., Reid, Parsons, & Green, 2012); however, there are insufficient published resources to guide supervision of the more complex repertoires required to be a competent behavior analyst (e.g., ethical decision-making; fluent application of concepts and principles in program design). The field needs literature to guide our supervisory practices and supervisors must be prepared to acknowledge their direct role in shaping the future of our field and the quality of future BCBAs and BCaBAs.

In recent years, the field has produced recommended practice guidelines in a number of areas, including staff training (Parsons et al., 2012), treatment selection (Geiger, Carr, & LeBlanc, 2010), and measurement system selection (Fiske & Delmolino, 2012; LeBlanc, Raetz, Sellers, & Carr, 2016) that

have helped shape our practice. The purpose of this paper is to establish five overarching recommended practice guidelines for individual supervision in the field of ABA. Although group supervision can be an important and valuable component of supervision, these practice guidelines will focus on individual supervision only. These guidelines were developed as part of an initiative to standardize practices in a human services agency. A subcommittee of BCBA-Ds met regularly for multiple years to identify critical aspects of supervisory practice, relevant regulatory guidelines by credentialing organizations, and resources to support supervisors in engaging in those practices. In general, these practices follow the timeline of establishment of the relationship through the end of the accrual of experience hours and beyond. The five practices include (1) Establish an effective supervisor-supervisee relationship, (2) Establish a structured approach with specific content and competencies, (3) Evaluate the effects of your supervision, (4) Incorporate ethics and professional development into supervision, and (5) Continue the professional relationship post-certification. For ease of reading and consistency, the authors chose to use feminine pronouns throughout as a substitute for he or she and his or her.

### Recommended Practice Guideline 1: Establish an Effective Supervisor-Supervisee Relationship

Before a supervisor can establish an effective relationship with supervisees, it is important for the supervisor to fully understand the gravity of the mentor role. The supervisor has the responsibility for development of all aspects of the applied behavior analytic repertoire including the assessment and treatment skills sets, ethical skill sets, overall values and professional behavior, and interpersonal skills for interacting professionally with parents, clients, co-workers and other professionals. The supervisor has an opportunity to shape successful behavior analysts who become emissaries for our profession. The relationship between supervisor and supervisee must be established with an understanding of the critical importance of the relationship and the need to focus supervision on development of optimal skills to produce final success as a practicing behavior analyst.

Building an effective supervisory relationship with appropriate expectations clarified at the outset is the foundation on which the remaining four recommended practices discussed in this paper are built. If the relationship is not established with clear guidelines, mutual agreement, and mutual respect, the remaining recommended practices will be difficult to consistently follow and dysfunction may develop in the relationship. For example, if the supervisor has not clearly described the expectation for mutual timeliness for all meetings, one of the two parties might be late to the meeting resulting in inadequate time to effectively focus on the targeted skills and client

issues. However, if the supervisor sets clear expectations before supervision begins and adheres to those same parameters of timeliness and prioritization of the relationship, this potential issue will be avoided rather than managed after the fact. Due to the importance of this practice recommendation, the remaining components of this specific recommended practice are discussed in sections that can be viewed as specific behaviors for the supervisor to engage in when establishing the relationship and adhering to recommended practice guideline 1. The individual receiving supervision should also read these guidelines and understand that the supervisor will use them in her practice with the supervisee.

**Supervision Contracts** The first step in establishing an effective supervisor-supervisee relationship is to ensure that both parties understand their roles and the scope of the supervision. To this end, the BACB requires that supervisors and supervisees agree to and sign a contract (BACB, 2015a) at the onset of the supervisory relationship. The supervisor can download and use a sample contract provided by the BACB on their website (BACB, 2015b) or create their own contract that meets the same specifications. Versions are available for university and non-university practice settings. The BACB clearly outlines the supervision contract requirements for practitioners, indicating that the supervision contract should clearly describe the responsibilities of the supervisor and supervisee, the scope of activities considered appropriate for experience hours, as well as instructional objectives for the supervisee. It is critical to clearly define, in objective and measurable terms, the criteria that must be met for the supervisor to sign the final Experience Verification Form (EVF; BACB, 2015a) and any consequences should either party fail to adhere to the requirements of the contract (e.g., if the supervisee feels she met her obligations for experience but the supervisor disagrees and does not sign the EVF, she can contest the determination to the BACB). The supervisor should ensure that the contract includes an indication that the supervisee may need to obtain written permission from her employer when applicable (e.g., the employer is not also the supervisor). The BACB requires that supervision contracts include language indicating that both parties understand and agree to act in accordance with all BACB ethical requirements.

The next step is to review the contract with the supervisee and answer any questions. It is recommended that the supervisor have the supervisee list out all of the activities, along with the frequency and duration of those activities that she would like to credit toward the fieldwork requirements. The discussion of appropriate activities may occur at the onset of the supervisory relationship and may be a continued conversation throughout the supervisory experience as new opportunities arise. The supervisor should then consider each of the requirements and determine whether the requested activities

are indeed appropriate activities according to the BACB. Appropriate activities focus on the supervisee acquiring new behavior analytic skills, as guided by the current task list. The activities must also be consistent with the dimensions of behavior analysis as outlined by Baer, Wolf, and Rilsey (1968). In determining the acceptable activities, it is also important to indicate how many fieldwork experience hours will be accrued weekly to determine the number of required supervision hours to which you are committing as a supervisor. A supervisor should not enter into the relationship if they cannot sustain the volume of experience hours and supervision that the aspiring certificant is hoping to accrue.

Setting Clear Expectations In the first meeting, the supervisor should take time to discuss her expectations of the supervisee. Setting clear performance expectations is a critical component in evidence-based supervision (Reid et al., 2012). Supervisees cannot be expected to meet performance expectations if those expectations are not clearly delineated. In turn, supervisors cannot effectively assess performance if the expectations have not been defined ahead of time. One aspect of the supervisor-supervisee relationship is to build the supervisee's repertoire of professional behavior; therefore, it is helpful to review specific expectations related to the supervision meetings. One strategy for enhancing organizational skills and professional behavior is to have the supervisee submit a draft agenda to the supervisor 24 h before each meeting. Crafting an effective agenda requires the supervisee to plan in a comprehensive and thoughtful way to prioritize their needs and make the supervision time productive. This advanced agenda also gives the supervisor the opportunity to review materials and plan resources that they might share with the supervisee in the meeting. See Appendix A for a sample agenda. The supervisor should also set specific expectations around note taking, deadlines for completion of products related to assigned activities, and systems for managing documentation (e.g., tracking experience and supervision hours). For example, the supervisor may ask the supervisee to send documents before supervision (e.g., an agenda, a tracking sheet with accrued hours, a prepared documentation form).

Receiving and Accepting Feedback Early in the relationship, the supervisor should take the time to describe the supervision process and that it will include specific feedback. This feedback should clearly indicate the aspects of the supervisee's performance that met expectations, as well as those that did not and what actions the supervisee should take to remediate deficits (Reid et al., 2012). Setting the expectation for specific feedback that is both positive and constructive, prepares the supervisee to expect to discuss performance strengths and weaknesses, and may lessen any undue stress associated with receiving feedback. This practice will also model for the supervisee how to give both positive and

constructive feedback in preparation for their future supervision of others. This is also a good time to set expectations regarding how feedback should be accepted. For example, the supervisor might acknowledge that receiving corrective feedback can be difficult, but if both parties understand the importance of the feedback and agree at be professional and respectful, the process should be positive. In addition, the supervisor might describe specific behaviors that the supervisee can exhibit when receiving any type of feedback, such as smiling, nodding, taking notes, paraphrasing the feedback back to the supervisor, and asking for clarification or examples.

Creating a Committed and Positive Relationship In addition to setting expectations, it is also important for the supervisor to convey a strong commitment to creating a positive learning context in which the supervisee is expected to flourish and also make some mistakes. The supervisor can convey commitment by being pleasant and caring (e.g., greet the supervisee each meeting, smile, point out the supervisee's successes and accomplishments) and being consistently professional (e.g., being on time to meetings, providing promised materials and resources, editing and responding to products in a timely manner, providing information about conferences or training events). These actions provide an important model for the supervisee's own behavior and communicate that the supervisor values the supervisee and takes the mentor role seriously. It is important to note that behavior analysts are obligated by the Compliance Code to use positive reinforcement in supervisory practices, and to deliver feedback and reinforcement in a timely manner (BACB, 2014). Therefore, creating a positive context and supportive relationship is not only optimal practice, but is also explicitly required by the BACB.

The overarching goal of the supervisor should be to develop and foster a relationship where feedback and guidance is valued and the supervisee wants to attend and be an active participant at the meetings. Supervisors can do several things to develop such a relationship, including providing frequent specific praise and feedback. When providing corrective feedback, the supervisor should clearly indicate the incorrect behavior demonstrated and specify what the supervisee should do differently next time (Reid et al., 2012) and use a behavioral skills training model in teach skills (Parsons et al., 2012). When providing corrective feedback, the supervisor may want to begin by making an empathetic statement, such as: "I understand that this skill is really complicated, and I appreciate your hard work in learning this skill." The supervisor should also consider framing the feedback with do statements, as opposed to don't statements (e.g., "Vary your praise statements by changing what you say." Vs. "Don't always say 'good job.'"). The supervisor can finish the feedback delivery with an optimistic statement about future performance and reiteration of the fact that she is glad to be the individual's supervisor (Reid et al., 2012). Remember what your mother told you: it's not just *what* you say, but *how* you say it (i.e., exact words, tone) that really matters.

## Recommended Practice Guideline 2: Establish a Plan for Structured Supervision Content and Competence Evaluation

Evidence-based supervision is both performance- and competency-based (Falender & Shafranske, 2004; Parsons et al., 2012). Specifically, the performance-based component of supervision focuses on the specific behaviors that are modeled and trained. Competency-based supervision refers to establishing a pre-determined mastery criterion for each behavior or task, and having the supervisee perform the task until that criterion is met. In order to accomplish this in a systematic way, supervisors might develop a set of objective and measurable target skills (i.e., competencies) using the current BACB task list. Doing so facilitates assessment of the supervisee's progress and mastery of the competencies. Having these competencies delineated also facilitates the supervisor engaging in self-evaluation to determine the efficacy of her supervision. Finally, for those individuals supervising multiple people, clear competencies with objective mastery criteria may prevent inconsistency or inequity in supervisory practices across supervisees.

Creating the competencies should begin by reviewing the BACB task list in detail, and organizing the tasks and content into logical groupings and sequences. It is recommended that supervisees have one primary supervisor who coordinates the overall progress of supervision while other BCBAs periodically provide additional supervision to provide multiple examples of how different professionals approach various issues. The primary supervisor should take the responsibility for ensuring that there is coordinated mentoring and evaluation for the supervisee. Attention should be paid to differentiating competencies for knowledge and discussion-based content, versus those that are performance and observation-based. Knowledge-based content requires the supervisor to ensure that the supervisee can demonstrate an understanding of the concept, principle, or technology (Parsons et al., 2012). For example, the supervisor may want the supervisee to correctly define and give examples of positive and negative reinforcement. In this case, the supervisor may simply ask the supervisee to provide the examples and compare their responses to a pre-determined acceptable response requirement for their verbal response. Performance-based content, on the other hand, focuses on correct performance of a skill at some indicated mastery criterion (Parsons et al., 2012), assessed in either live or role-play scenarios. For example, the supervisee may need to conduct all conditions of a functional analysis with 100 % procedural integrity. Simply describing the set up would be insufficient for this mastery criterion. In this case,

the supervisor should set up a situation to directly observe the supervisee engaging in this task with a client or in a role-play and score performance accordingly. Each of these competency types is explained in more detail below.

Evaluating knowledge-based competence typically involves having the supervisee provide definitions, explain the content, give examples and non-examples, and critically evaluate scenarios. It is important for the supervisor to determine the scope of potential audiences to ensure that the supervisee can apply the content to the requisite contexts. For example, it may be important for the supervisee to be able to explain the process and procedures related to extinction in both behavior analytic terms, as well as terms suitable for non-behavior analytic audiences (e.g., parents, teachers, school administrators). An example of a knowledge-based competency that requires the supervisee to distinguish between environmental and mentalistic explanations of behavior is provided in Appendix B.

Assessing competency with performance-based content is typically completed by observing in vivo performance of the skill or task, reviewing a permanent product (e.g., data sheet, behavioral intervention program, graph), or role-playing activities that are not readily observable. For example, the supervisee might want a supervisee to complete all conditions of a functional analysis with 100 % procedural integrity. The supervisor can either arrange an opportunity to do this live with an actual client or complete this in a role-play context if no appropriate direct clinical opportunity exists. An example of a performance-based competency that requires the supervisee to design and describe a functional analysis is provided in Appendix C. As the supervisee moves through the competencies with their supervisor(s), the primary supervisor can use this list to track progress on skills and ability to respond to and incorporate feedback.

The supervisor should make the competencies target list available to the supervisee, and review the list at the start of the supervisory relationship. The supervisor and supervisee should discuss the areas and tasks to focus on first. Selection might be driven by the supervisee's current work activities in an attempt to select those tasks and content areas that are most relevant and which the supervisor might master most easily. Another consideration is the supervisee's pre-existing skill set in certain areas. If a supervisee does not have any experience creating measurement procedures, the supervisor might select this as an early skill to work on to provide sufficient time to address the concepts and skills in a systematic manner. In addition, the supervisee can use the list to self-evaluate areas of strength and weakness. This self-reflection might lead to the supervisee nominating areas to target for focused practice and other skills that are already strong that she might request to immediately try to perform at mastery. For example, if a supervisee has consistently graphed data in a software program, she might ask to present a work sample with follow up questions posed by the supervisor (e.g., "can you explain why you chose a dotted phase change line here?", "how would you create a secondary *y*-axis?") rather than direct demonstration of the actual graphing behavior.

The supervisor should clearly explain that it is unlikely the supervisee will meet every competency the first time they attempt to do so. A supervisees' meeting of the mastery criteria for each competency on the first attempt might indicate that the mastery criteria have been set too low. The purpose of developing clear and objective competencies is to ensure that knowledge and skills are demonstrated at a level that ensues that consumers will receive high quality services, which requires the standards to be quite high. Explaining to the supervisee that she is likely to need to repeat some competencies may reduce emotional responses and facilitate diligent preparation for a second attempt when the initial attempt is unsuccessful.

The supervisor should also clearly and supportively describe the assistance that will be provided and the steps for remediation when the criterion is not met for a competency. Because the competencies are determined ahead of time, the supervisor should be able to objectively determine if the supervisee meets a requirement. If the supervisee does not demonstrate mastery, the supervisor should provide additional support using a behavioral skills training approach, such as reading material, and should model, allow practice, and provide feedback, until the mastery criterion is met. The supervisor could direct the supervisee to pre-selected articles or book chapters on the competency with guidance to read further before attempting to retest (see Appendices B and C for examples of extra resources for sample competencies). The supervisor should have pre-made extra examples, non-examples, or scenarios that they can use as rehearsal opportunities or for a second testing opportunity.

Developing and using competencies during supervision will ensure the supervisor has a well-constructed plan to develop the supervisee's skills, enabling the supervisee to have experiences that will increase the likelihood of being successful in her new career. The BACB requires that supervisors develop specific evaluation criteria for the tasks and content covered in supervision and convey that information to the supervisee prior to the start of supervisory relationship (BACB, 2014). While developing these resources is no easy task, and needs to be done thoughtfully and before supervision begins, the benefit of doing so will positively impact each supervisee, as well as the clients with whom the supervisee works.

### **Recommended Practice Guideline 3: Evaluate** the Effects of the Supervision

The BACB (2014) specifically indicates that supervisors must create systems for the purpose of assessing the outcomes of their supervision activities and efforts. A supervisor can

evaluate the effects of her own supervision in a number of different ways including the following suggestions. The supervisor might track the number and rate of competencies completed by the supervisee. During meetings, the supervisor can note changes in the language used by the supervisee to assess if she is using more precise language as modeled by the supervisor. The supervisor might also track the number and type of errors made in permanent products (e.g., data sheets, program and intervention plans, job aids and treatment integrity forms, reports). For example, the supervisor might track the number of grammatical errors and technical errors. If the number of different errors decreases over time in response to specific feedback, then the supervisor has some indication that her supervision is having a positive effect. In addition, improvements in client outcomes might be indirectly suggestive of positive effects of the supervision process. In other words, the clinical expertise and guidance provided by the supervisor may result in improvements in clinical programming and outcomes.

The supervisor can also solicit feedback directly from the supervisee. This feedback can be solicited in an ongoing, informal, and non-threatening way during supervision meetings. Early on in the supervisory relationship, the supervisor can indicate the preference to receive feedback from the supervisee. The supervisor should frequently ask the supervisee if she feels her needs are being met and if the information is being provided in an easily consumable way. If the supervisee provides relevant feedback to the supervisor should do her best to incorporate that feedback immediately.

On a more formal note, the supervisor could create a brief structured survey for the supervisee to complete. The survey should include specific areas, including organization, the knowledge level of the supervisor, and provision of praise and feedback. In addition, the supervisor could ask the degree to which the supervisee finds the supervision meetings and information covered useful and relevant to her clinical work. The survey could also include open-ended questions, such as: "What do you like best about the supervision activities?" or "What could we do differently together to enhance the supervisory experience?" Using a structured survey may work best when a supervisor has more than one supervisee and can administer the survey such that the results are anonymous. Some supervisors might have the opportunity to discuss the effects of supervision with the supervisee's employer. In this case, the supervisor might consider having brief, recurring discussions with the employer to assess the degree to which positive changes in the supervisee's skills set have been detected. If appropriate, the supervisor could ask the employer to complete a brief survey at a mid-point and at the end of the supervision relationship.

The strategies described above and many others could be used to evaluate supervisory practices. As with any other behavior analytic endeavor, the behavior analyst should collect some type of data that is indicative of the impact of the specific

strategies that she employs. Without this examination of the effects of supervision, the supervisor might continue to use ineffective strategies. Thoughtful reflection, honest discussion, and measurement of some performance that should be expected to change as a result of supervision will allow the supervisor to make well-informed, data-based decisions about their ongoing supervision activities.

# Recommended Practice Guideline 4: Incorporate Ethics and Professional Development into Supervision

In addition to competencies addressing behavior analytic knowledge and skills, the supervisor should address and directly shape ethical and professional development during the supervisory relationship. In fact, 7.0 of the Compliance Code requires that behavior analysts actively work to establish and foster a culture that values and promotes ethical behavior in their work environment and actively increase others' awareness of code 7.0 (BACB, 2014). The three authors of this manuscript have a combined 27 years of experience providing supervision to aspiring BCBAs, BCaBAs, and licensed psychologists. In our experience, ethical dilemmas present the most challenging aspect of a new graduate's career. Clinicians report this to be one of the most difficult parts of their everyday experiences. In spite of review and mastery of the ethics code in their training and testing situations, an aspiring or new credentialed clinician may feel daunted by ethical situations that arise suddenly in practice settings. The details of an ongoing ethical dilemma can make it seem different from scenarios that have previously been discussed even when the fundamental issues are similar, resulting in a failure to use the appropriate response in this generalization opportunity.

It is critical that supervisors expose supervisees to a wide variety of ethical dilemmas, actively analyze the situations for the core ethical issues that should control responding, evaluate the benefits and concerns of multiple potential responses together (i.e., structured problem solving). Supervisors in organizational settings should become familiar with strategies for building a structure that promotes ethical behavior and supervision (Brodhead & Higbee, 2012). Readers are also directed to Bailey and Burch (2011) Appendix C: Fifty Ethics Scenarios for Behavior Analysts for relevant and varied examples to discuss in supervision. It is equally important to engage in ongoing discussions about actual ethical dilemmas as they occur, creating multiple learning opportunities for the supervisee to practice decision-making around difficult issues. Though the supervisee may always need support in making difficult decisions, it is important that they experience this complex process while under supervision. This ensures that the first time they encounter an ethical dilemma does not occur

Table 1	Practice	guideline	resources	and ideas
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Guideline	Area	Action	Resources/ideas
Guideline 1 Establish Effective Supervisor- Supervisee Relationship	Contracts	Use a well crafted contract	→Download template from BACB  →Customize the template from BACB or create own
	Clear Expectations	Identify clear expectations for supervisor and supervisee behavior	→Create a document or PowerPoint defining supervisor and supervisee behavior expectations and review with supervisees at the outset
			→Create agenda and notes templates
	Receiving and Accepting Feedback	Develop and use effective feedback skills, directly teach supervisees to effective feedback skills	→Create a document or PowerPoint with specific information about how to receive and accept feedback
		chective reedback skins	→Chapter 20 Bailey & Burch 25 Essential Skills
			Parsons et al. (2012) Article on effective staff training
			→Print and post the infographic "The Most Powerful Leadership Tool—Positive Reinforcement—5 keys to Effective Delivery" (Daniels, 2015)
			→Review the blog articles at http:// aubreydaniels.com/blog/ (Various blog articles; Aubrey Daniels Blog, 2015)
	Creating a Committed and Positive Relationship	Develop skills and systems that facilitate development of a positive culture and supervisory experience	→Dale Carnegie (1981) "How to Win Friends and Influence People."
			→Article by Darnell Lattal "The Science of Success: Creating Great Places to Work" (Lattal, 2012)
			→Create a company-wide providing supervision
			→Create a company-wide training for those providing supervision
			→Model critical behavior for creating a positive supervision experience
			→Provide specific feedback to supervisees
			→Incorporate this into staff performance evaluations
Guideline 2 Establish A Structured Supervision Content and Competence Evaluation Plan	Create Measurable Competencies (knowledge and performance based)	Develop a system for addressing and measuring critical areas of knowledge and skills	→Use the BACB™ Task List to create specific each task
	,		→Create an accompanying supervisor's manual with example definitions, scenarios, and resources
	Review Competency Requirements Supervisee	Set aside time meetings to fully and competencies	→Provide supervisees with a version of the competencies for self-management and tracking
			→Review expectations for demonstration of mastery as each task is addressed
	Create Plan for Addressing Supervisee Failing to Demonstrate Competency	Develop a systematic procedure for tracking and remediating	→In the supervisor's manual, include extra resources and back-up activities to be completed
	Сопреспе		→Document steps taken to address lack of content/skill demonstration and level of success

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Guideline	Area	Action	Resources/ideas
Guideline 3 Evaluate the Effects of the Supervision	Monitor Effects During Supervision and Work Activities	Develop system for assessing the effects of supervision activities	→Create a tracking system to measure number and rate of competencies mastered
			→Measure application of the skills during supervisees' work activities within the company
			→Include measures related to effects of supervision on supervisee's performance evaluations
	Solicit Feedback	Actively solicit feedback from Supervisees	→Regularly ask for feedback directly
			→Create an anonymous survey that is administered to supervisees on a regular schedule
Guideline 4 Incorporate Ethics and Professional Development into Supervision	Ethics	Actively engage in activities to promote discussion and critical analyses of ethical considerations and potential dilemmas Engage in discussions and problem solving around actual ethical dilemmas	→Create a repository of examples of relevant ethical dilemmas; solicit from colleagues
		Engage in discussions and problem solving around actual ethical dilemmas	→Create structured relevant codes situations that organization
			→Develop an "Ethics" committee to disseminate resources and help address concerns and have supervisees participate or review material
			→Use the examples provided Bailey and Burch (2011) book
			→Use examples from the "Ethics Challenge" section in issues of the APBA Reporter (APBA, 2015)
	Professional Development	Actively promote professional development and provide opportunities	→Provide information about local and relevant professional conferences and workshops
			→Provide assistance conferences and presentations
			→Assign articles and require written summaries and presentations
			→Use group supervision to have supervisees read, analyze, summarize, and present on
			→Suggest journals for subscription and groups/ associations for membership
			→Read article by Carr and Briggs (2010) on strategies for remaining in contact with research
			→Use the ERIC database through ProQuest for those registered with the BACB <sup>TM</sup> through the BACB Gateway
Guideline 5 Continuing the Professional Relationship Post Certification	Establish Parameters for Ongoing Support	Actively communicate that the supervisee can contact you in the future	→Create schedule of ongoing check ins
			→Create network of individuals who can serve as professional contacts for supervisee
			→Invite the supervisee back to engage with and support others pursuing BCBA certification
			→Create access to university resources

post-certification. That is, having ample opportunity to discuss issues and tackle hypothetical or real problems in supervision

will increase the supervisee's confidence and skill set in dealing with ethical dilemmas.

Professional development encompasses the ongoing activities, which facilitate continuous learning and skill development (e.g., leadership training, workshop attendance for new skill development) and familiarity with current research-based best practices (e.g., remaining in contact with the literature, attending conferences). Supervisors should encourage supervisees to subscribe to one or more relevant behavior analytic journals. Carr and Briggs (2010) provide a framework and practical suggestions for maintaining contact with applied behavior analytic literature. Supervisors can model appropriate professional development behavior by consuming the published literature, identifying relevant articles, and analyzing those articles with the supervisee. Supervisors should regularly share relevant articles with the supervisee during supervision meetings. The articles might include demonstrations of a specific intervention (Charania et al., 2010; Riviere, Becquet, Peltret, Facon, and Darcheville 2011), conceptual and review papers (Hanley, Iwata, & McCord 2003; Michael, 1985; Volkert & Vaz, 2010), or syntheses of practice guidelines for clinical practice (e.g., Geiger et al., 2010; Grow, Carr, & LeBlanc, 2009; Hanley, 2012; Hanley, Jin, Vanselow, & Hanratty, 2014; Iwata & Dozier, 2008; Tiger, Hanley, & Bruzek 2008). Many of the articles referenced include helpful tables, decision-making algorithms, and tools in the appendices that supervisees may find useful. It may benefit supervisees to observe supervisors use the published literature to select relevant articles for a clinical need and translate the procedures into a clinical protocol for a client. Supervisors may also look to Bailey and Burch (2010) for a detailed resource on critical skills for professional behavior analysts. Bailey and Burch provide a self-evaluation of professional skills that supervisors may wish to have supervisees complete at the beginning and end of the supervision experience.

Supervisors can also encourage conference attendance and provide guidance on professional behavior and strategies for maximizing learning and networking opportunities during the conference. Supervisors should review conference schedules with supervisees and offer feedback with respect to selection of topics and specific presenters. Attending talks on a range of topics can help to expand the supervisee's knowledge base and perspective on the breadth of the field. Accordingly, a behavior analyst might provide services for young children but attend a talk on working with older adults due to a personal interest or as preparation for potentially expanding into a new practice area (LeBlanc, Heinicke, & Baker, 2012). Supervisees may be unfamiliar with specific researchers in the field so the supervisor might direct attendance selections based on the presenter's history, affiliation or significant contributions to the field.

### Recommended Practice Guideline 5: Continuing the Professional Relationship Post-Certification

Once a supervisee has completed their supervision, defined as both meeting the hour requirement and meeting all competencies provided by the supervisor, the relationship between supervisor and supervisee should transition but probably not end. The formal ending of this part of the relationship should be celebratory and the supervisor and supervisee should take some time together to reflect on what went well, what they could improve upon, and an overall analysis of the experience. Both parties should give each other feedback so the supervisee is equipped to engage in similar professional relationships with supervisors in the future, and the supervisor is equipped to continue to engage in effective supervisory practices and change any areas that may need improvement.

The pair should also plan for ongoing mentorship and collaboration for the future and establish how they will maintain a relationship going forward. That is, the supervisor should become an ongoing source of support for the supervisee though the nature and frequency of contact and support will necessarily change. This ongoing support and collaboration could occur in a number of ways including the following: the supervisor could invite the supervisee to a peer review group to ensure a constant network of colleagues for consultation; the supervisor-supervisee pair could establish continuing monthly meetings for mentoring; the pair could share articles and other relevant resources as they encounter them; the supervisor could introduce the supervisee to other professionals in the field; the supervisor could provide letters of recommendations for future career opportunities; the supervisor could introduce new supervisees to past supervisees and facilitate establishment of a peer network. The pair could work collaboratively on clinical or research projects as opportunities to do so arise. This list is certainly not exhaustive and many other strategies might work just as well as the ones listed here to foster ongoing contact and mentorship, even if the contact is much more sporadic.

### **Conclusions**

Our field increasingly recognizes the importance of effective supervision and explicit instruction in supervisory experiences. The changes to the supervision and experience requirements (BACB, 2012) attest to the importance of effective and meaningful supervised experience hours in the repertoires of the aspiring certificants. In addition, the new requirements for ongoing continuing education in supervision in each recertification cycle create the expectation of continued quality improvement in this critical process. Toward this end, this article might be incorporated into a journal club activity for continuing education units and sample study questions are included in Appendix D.

In keeping with the recent trend for creation of recommended practice guidelines in various practice areas of applied behavior analysis (Fiske & Delmolino, 2012; Geiger et al., 2010; LeBlanc et al., 2016; Parsons et al., 2012), this paper presents five overarching recommended practice guidelines for individual supervision. These practice guidelines are intended to be a starting point for individual supervisors and organizations in evaluating their current supervisory practices, and a roadmap for developing supervisory systems that meet the requirements of the BACB. Though these recommended guidelines are based on various published resources (Reid et al., 2012; Bailey & Burch, 2010; Brodhead & Higbee, 2012) and a comprehensive clinical standards initiative of a large human services agency, the grouping of these five recommendations has not been experimentally determined to be best practice compared to any other specific practice. There is great potential to develop a more robust scientific literature evaluating these and alternative or supplemental practice recommendations to guide our supervision efforts.

Perhaps this article will provide guidance to behavior analysts who find themselves in the critical and rewarding position of providing supervision and mentorship to supervisees. There is no more valuable contribution to the field that the shaping of the repertoires of our next generation of professionals. The Appendices and Table included here contain ideas, examples, and suggested publicly available resources relevant to each of the recommended practice guidelines and actions. However, many other resources could be developed and shared in our professional community. An updated version of this paper or alternative suggestions could become a common event in the published literature as the collective knowledge and expertise in the area of effective supervision grows (Table 1).

#### Compliance with Ethical Standards

**Conflict of interest** Authors declare that they have no conflict of interest.

**Ethical approval** This article does not contain any studies with human participants performed by any of the authors.

### Appendix A

Sample Individual Supervision Agenda created by supervisee Individual BCBA Supervision Agenda Wednesday May 27<sup>th</sup>, 2015; 1 pm-2:30 pm Supervisor: George Collins, Ph.D., BCBA-D

Supervisee: Jill Smith

- General check in (5 min)
- Review and discuss updated hours tracking system, discuss activities for next week (10 min)
- Follow up action item from last week's competency (#40, creation of line graph) (15 min)
- Corrected color on graph
- New Competency 2: changing mentalistic explanations into environmental explanations (20 min)
- Review new protocol for consumer A on teaching mands for information using "how" (20 min)
- Review feedback on performance and complete supervision documentation (10 min)
- Review plan for next supervision meetings (10 min)

### Appendix B

Sample Knowledge-Based Competency

Distinguish between mentalistic and environmental explanations of behavior when provided with scenarios.

The team member should be able to respond to at least two examples you give to tell you whether the example meets the criterion for an environmental explanation of behavior and if not, why. Read each example and have them label it as an environmental explanation or a mentalistic explanation and then have them describe why they classified it as such.

- Example 1: Jack engages in challenging behaviors such as hitting and kicking because he knows he will get away with it.
- This example does not meet an environmental explanation of behavior because it relies on an inner or mental explanation ("knowing") to explain Jack's behavior and does not describe observable events or Jack's interaction with the environment.
- Example 2: After an academic task is presented to Jack, he engages in problem behavior in the form of hitting and kicking. When he does this, social attention is provided from the teacher's aide and Jack continues to engage in this problem behavior when presented with academic tasks.
- This example meets an environmental explanation of behavior because it relies on observable environmental events (i.e., academic tasks are presented, social attention is provided), and it relies on the interaction between Jack and his environment (his teacher, academic tasks, etc.).
- Example 3: Jill does not ask for things she wants because she has not yet made the association between using language and getting things.
- This example does not meet an environmental explanation of behavior because it relies on an inner explanation ("making the

association") to explain Jill's behavior. It does not use observable events or Jill's interaction with her environment to describe her behavior.

- Example 4: Jill vocally requests "juice" approximately 50 times per day because in the past, her mom has provided her juice each time she requested it.
- This example meets an environmental explanation of behavior because it relies on observable environmental events (i.e., her mom provides juice contingent on her asking for it) and it relies on the interaction between Jill and her environment.

#### Teaching points and strategies:

If the team member does not respond correctly to at least two of the above examples, use the following points and strategies to teach them to distinguish between these types of explanations. Continue providing examples until the team member is able to respond correctly to at least two of them

- Have them provide the definitions:
- "A mentalistic explanation of behavior relies on hypothetical constructs or explanatory fictions to account for some portion of causality."

Explanatory fictions take the place of observable events, are hypothetical, and do not attribute to a functional account. Examples include: "intelligence," "associations" "awareness."

Hypothetical constructs are unobservable processes. Examples include "temperament" "personality," "the superego."

 "An environmental explanation of behavior relies of observable environmental events and person-environment interactions to account for causality."

An environmental explanation is often more parsimonious, more action-oriented, more pragmatic, more likely to lead to effective change, less likely to lead to circular reasoning, more likely to be scientifically testable.

 Talk the team member through the reason a behavior analyst would want to use environmental explanations of behavior and avoid mentalistic ones.

#### References:

You may direct the team member to these resources if additional study is needed and use them yourself to generate new examples and obtain more teaching points and strategies.

 Cooper, J.O., Heron, T.E., & Heward, W.L. (2007). Applied behavior analysis (2<sup>nd</sup> Ed.) (pp. 10-14). Upper Saddle River, New Jersey: Pearson Prentice Hall.

### Appendix C

Sample Performance-Based Competency

Design and describe a functional analysis protocol; Graph and interpret the results

The team member should bring a permanent product to supervision that contains the following:

- · Informed consent from consumer
- Evidence of incorporation of information from descriptive assessment
- An operational definition of the target behavior(s)
- Clear description of which behaviors are to be included for contingency manipulation or data collection only
- A description of the measurement system
- A description of & rationale for each test condition
- There must be a control condition
- Starts with basic conditions (alone/no interaction, attention, play, demand) and individualizes conditions only based on DA results
- Only includes tangible if strong evidence to do so
- Specification of relevant materials per condition
- Preference or demand assessment used for all conditions
- A statement about session order
- · Discrimination aids
- Safety criteria with termination criteria if behaviors are potentially dangerous
- A plan for training staff to implement all conditions utilizing BST approach

The team member should also provide a rationale for selection of that type of functional analysis (see Iwata & Dozier, 2008 for details).

The team member should bring a graph of a completed functional analysis and interpret the results

*Note*: If the team member brings a hypothetical protocol and graph, have him/her run a brief (e.g., 2 min) mock test condition or two

Teaching points and strategies:

Consider having the team member observe and practice with a team member who is proficient in this area to gain more experience in creating and conducting functional analyses. Create many hypothetical examples and break the pieces of the FA process into small steps and work on one step at a time until proficient (e.g., spend one supervision session focusing on creating the operational definitions for the FA. Once proficient, practice describing a measurement system etc.).

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You may direct the team member to these resources if additional study is needed and use them yourself to generate new examples and obtain more teaching points and strategies.

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### Appendix D

Potential Study Guide for Journal Clubs

- List two recent changes in the BACB supervision and experience requirements that are pertinent to the supervisor's preparation to supervise.
- Explain why a detailed and clear supervision contract is a critical tool to help with establishing an effective supervisory relationship.
- List three critical pieces of information that should be included in a contract for supervision.
- Explain how having a list of competencies related to the BACB task list helps to structure the supervision experience and why this is important.
- 5) What are three strategies you might use to evaluate the effects of the supervision that is being provided?
- 6) Why is it important to continue the mentorship relationship beyond the completion of the required experience hours and how might the supervisor facilitate the continued relationship?

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