



# Soft Skills: The Case for Compassionate Approaches or How Behavior Analysis Keeps Finding Its Heart

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## Abstract

As the field of behavior analysis expands, our need to develop ourselves as more effective collaborators, particularly with families who may be the primary consumers of our science, becomes paramount. As scientists, our training lies primarily in the behavior analytic technologies that we study and apply. But our ability to disseminate our science, collaborate with non-behavior analysts, and ultimately grow our field hinges on our ability to navigate interpersonal situations in a way that puts forth compassion and humanity. We have the opportunity and capability to use our empirical procedures to implement and assess the effectiveness of interventions that target the soft skills of our field. The current article discusses the benefits of empathic and collaborative approaches in fields related to behavior analysis and provides suggestions for current behavior analysts to incorporate compassionate care into their practices. We provide a checklist for compassionate interactions accompanied by possibilities for its use as a tool for self-evaluation, procedural fidelity, and comprehensive training in the area of collaboration with families. Finally, we discuss areas for future research with respect to assessing and improving behavior analysts' compassionate approaches to treatment.

**Keywords** Skills · Family centered · Behavior analysis · Collaboration

Behavior analysis continues to grow as a field and as an evidence-based treatment option for a variety of applications, particularly those associated with autism spectrum disorder (ASD). The unique profiles of individuals on the autism spectrum, which often include behavioral difficulties and complex learning profiles, can present challenges for families who may look to treatment based on applied behavior analysis (ABA) to support their child's behavioral and educational needs (American Psychiatric Association, 2013). It has been recommended that children with ASD receive treatment based on the principles of ABA, including discrete-trial instruction, incidental teaching, and functional communication training (Smith & Iadarola, 2015); it has been further recommended that families be involved in children's treatment plans (National Autism Center, 2009, 2015). The *Professional and Ethical Compliance Code for Behavior Analysts*, to which

Board Certified Behavior Analysts must adhere, includes several items related to collaboration (Behavior Analyst Certification Board [BACB], 2016). For example, behavior analysts must “involve the client in the planning of and consent for behavior-change programs” (Code 4.02, p. 12) and “use language that is fully understandable to the recipients of those services” (Code 1.05[b], p. 5). Behavior analysts have an obligation to the field and to their clients to ensure that collaboration with families is evident within the treatment process. Although these code items provide a starting point for clinicians, as a field we lack a comprehensive analysis of the collaborative skills needed to navigate the implementation of ABA in a human service field. In order to promote parental or caregiver involvement and collaboration, behavior analysts must be skilled in facilitating this process. Interpersonal interactions that are experienced as directive, impersonal, and lacking in compassion are unlikely to lead to continued services, empowered families, or positive experiences with ABA. Though collaboration can occur in the absence of compassionate responses, it may be less effective than an approach that prioritizes family values for a number of reasons described throughout this article.

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## Why a Compassionate, Collaborative Approach Important?

### Better Outcomes

A family-centered approach to treatment empowers families and ultimately leads to better care. This has been demonstrated across various fields including pediatric nursing, social work, education, and health care (Allen & Petr, 1996; Horst et al., 2000). Shelton and Stepanek (1994) summarized eight key principles incorporated in family-centered care:

1. The family is the constant in a child's life, whereas service providers come and go.
2. Collaboration with families at all levels of programming is critical.
3. Professionals exchange unbiased, complete information with families.
4. Professionals honor the diversity of families.
5. Professionals understand the different ways of coping within families and are responsive to them.
6. Family-to-family networking is encouraged and supported.
7. Policies and systems are flexible, accessible, and comprehensive enough to meet the complex and diverse needs of children with special needs and their families.
8. In the final analysis, providers see children with special needs as children first and families raising children with special needs as families first.

These principles are related to the development of strong therapeutic relationships and so should be incorporated into collaborative skills.

Beatson (2008) described a number of enhancements to treatment that focus on collaboration with families throughout the assessment and treatment process. These include sharing decision making, empowering families, and offering families choices. Positive outcomes related to the provision of family-centered care include decreased hospitalizations, increased satisfaction, and increased family involvement (Horst et al., 2000). With regard to the assessment process, the opportunity for families to express concerns and ask questions is critical. If this input is prioritized, it will lead behavior analysts to formulate recommendations that are tailored to the family system's specific needs (Prelock et al., 1999, 2003).

In related fields that place a high premium on positive results, such as health care, preliminary findings have indicated that compassionate care and empathic responding can lead to better outcomes. Though empathy and compassion are not necessarily synonymous, they are related to many of the same observable behaviors that a practitioner may exhibit during treatment. Empathy is related to perspective taking, whereas compassion "takes empathy a step further" and "converts

empathy into an act aimed at the alleviation of suffering" (Taylor et al., 2018, p. 2). For example, if a patient said they were nervous about a procedure, the physician may recognize how they are feeling (empathy). The physician may then make a statement of reassurance or share a similar experience in order to attempt to alleviate discomfort (compassion). Beck et al. (2002) found that positive care outcomes (e.g., satisfaction, trust, rapport, comprehension, compliance, and adherence) and long-term health effects (e.g., glucose control) were associated with a number of specific types of physician responses during patient–physician interactions. The responses found to be associated with favorable outcomes included verbal responses such as encouraging patient questions, providing reassurance, offering support, and giving explanations, as well as nonverbal responses such as nodding one's head, leaning forward, orienting one's body more directly, and uncrossing legs and arms (Beck et al., 2002). Wolf (1978) also described the work of Haase and Tepper (1972), whereby verbal statements were viewed as much more "empathic" (Wolf, 1978, p. 207) if they were accompanied by nonverbal behaviors such as leaning forward, maintaining a closer proximity, and orienting toward the other person.

The results of a study by Hojat et al. (2011) indicated that patients' management of their diabetes was better when their physicians had higher ratings on the Jefferson Scale of Physician Empathy (JSPE). The JSPE, which is the most commonly used measure for assessing practitioner empathy reported in the medical literature, assesses empathy as a cognitive attribute involving an understanding of the patient's experiences, concerns, and perspectives (e.g., "Seems concerned about me and my family," "Asks about what is happening in my daily life," and "Is an understanding doctor"; Hojat et al., 2011; Kane et al., 2007). The JSPE has been found to have satisfactory psychometric properties, with high reliability for samples of 56 nurses and 42 physicians (Fields et al., 2004). Though the results from these types of studies should be interpreted cautiously as they rely on certain subjective measures (i.e., rating scales), these findings should spur interest within the field of behavior analysis about ways to incorporate better interpersonal practices toward a goal of improved care. Given the current findings that empathic responding can lead to improved outcomes and the assertions that empathic responding can be improved through education (Bonvicini et al., 2009), the field of behavior analysis is uniquely positioned to explore avenues that can lead to better care and subsequently more favorable outcomes.

In a limited number of studies in the medical field, the relationship between more objective measures of client outcomes and clinician training in relationship-building skills has been evaluated. In a systematic review and meta-analysis, Kelley et al. (2014) assessed the impact of clinician training in cognitive and emotional care on both objective client outcomes (e.g., blood pressure) and validated subjective

measures (e.g., pain scores). The authors included empathy, respect, and acceptance under emotional care, and gathering and sharing medical information, expectation management, and patient education under cognitive care. In addition, they acknowledged the overlap of communication interventions including checking for patients' understanding of diagnoses and recommended treatments in both categories. Findings indicated that a small but significant improvement in client outcomes and validated subjective measures was observed as a result of clinician training across the 13 randomized controlled trials included in the review.

Despite the overall lack of measurement data and objective outcomes in this area, these findings can begin to guide behavior analysts to carefully consider collaborative behaviors with families. This focus would place behavior analysis firmly within a framework of social validity. It is the case after all that ABA is tasked with making changes of social importance, and as Wolf (1978) asserted, "if those things described by subjective labels were the things that were most important to people, then those were the things, even though they might be complex, that we should become more concerned with" (p. 206). It is in this way that the field of behavior analysis finds its value in society, in making changes that are significant to both the community and individuals and families.

### Increased Adherence

As a part of any quality treatment, following the protocol or treatment plan from the provider is an important facet of "high-quality interpersonal care" (Beach et al., 2006, p. 661). Allen and Warzak (2000) described adherence to treatment as the implementation of treatment with accuracy and integrity. Methods to increase adherence to programming have been studied across the medical literature, as well as across other human service fields. The quality of the physician–patient relationship has been identified as relating to increased adherence to treatment. Skills such as communication between the patient and physician and patient trust in the physician, as well as knowing and understanding the patient, were identified as important interpersonal skills for improving adherence to medical treatment (Allen & Warzak, 2000; Beach et al., 2006).

Beach et al. (2006) evaluated the impact of quality relationships between patients and their physicians on adherence to HIV treatment and health outcomes through interviews with 1,743 patients. One item in the interview was designed to evaluate patients' perception of physicians' patient-centeredness, or their understanding of their patients as a person rather than an individual with HIV only ("My HIV provider really knows me."; Beach et al., 2006, p. 662). This was used to represent patient–physician relationships, as previous research indicated this metric was most closely correlated with patient

adherence. Patients responded "yes," "no," or "don't know," and data were analyzed dichotomously, with "no" and "don't know" representing a lack of patient-centered behavior on the part of the physician and "yes" representing the presence of patient-centered behavior. Patients who perceived their physicians as engaging in patient-centered behavior were significantly more satisfied with their care and reported greater improvements in their medical condition. Patients were also more likely to adhere to their HIV treatment when they believed that their practitioner had a good understanding of who they were as a person.

Similarly, Schneider et al. (2004) examined the impact of physician–patient relationships on adherence to HIV treatment using antiretroviral medication. This treatment regimen was identified as a complex behavior that patients had demonstrated difficulty adhering to. Six previously tested scales were selected to assess the patient–physician relationship. These scales included "general communication, provision of HIV-specific information, egalitarian decision-making style, overall satisfaction with care, willingness to recommend the physician to others, and trust in the physician" (Schneider et al., 2004, p. 1097). A four-item survey was used to measure self-reports of adherence to medication regimens over the past 4 weeks (three questions) and past 7 days (one question). The researchers found statistically significant correlations between reported adherence to HIV treatments and all measures of the physician–patient relationship.

The importance and difficulty of treatment fidelity have also been documented in the behavior-analytic literature (Allen & Warzak, 2000). As indicated in previous sections, researchers in the medical field have demonstrated enhanced adherence to treatment with improved collaborative skills across patient–practitioner relationships (e.g., Beach et al., 2006; Schneider et al., 2004). Consequently, it is evident that in order to improve adherence to treatment plans, the field of behavior analysis would benefit from increased prioritization of collaborative relationships. Specific to parental adherence to programming, Allen and Warzak (2000) described the importance of examining not only the contingencies maintaining the child's behavior but also the contingencies that maintain parental behavior within a family structure. The authors identified many variables that can negatively impact parental adherence to protocols. Some of these variables included a lack of stimulus generalization to evoke the trained behaviors across settings, an insufficient number of exemplars trained, high levels of skill complexity, an inability of the clinician to provide consistent consequent events for treatment adherence, and competing contingencies that reinforce behaviors that are incompatible with adherence to programming. The authors additionally identified parental barriers that may impact adherence to programming, including cognitive impairment, restricted economic resources, and social isolation. One suggestion made by Allen and Warzak to compete with these

challenges was to select treatments that are demonstrated to be effective, as they are likely conceptually systematic and can be implemented by parents with fidelity.

Beatson (2008) noted similar challenges that may arise in collaborations between professionals and families that may impact adherence to programming. Beatson studied family-centered care within the Vermont Rural Autism Project across a 3-year span. This was a grant-funded project in which speech-language graduate students were taught to use family-centered assessment and intervention when training families with children diagnosed with ASD. Beatson described consistent barriers to the implementation of programming, including poverty and cultural differences, which can include the impact of socioeconomic status on the availability of resources. Beatson noted additional challenges such as communication breakdowns, including difficulty in negotiations among family and/or providers. Furthermore, power struggles among providers and caregivers were identified as potential barriers to the implementation of family-centered programming. The emotional responses that can accompany these potential barriers, such as worry, can certainly add strain to the relationship between family members, as well as with the practitioner. Any of these factors can result in what Beatson referred to as “role stress” (p. 311). Stressors that occur within a role or relationship, including the examples provided previously, are all ways in which stress can be evoked by relationship barriers such as stylistic differences between the service provider and the family. In these moments of disparity, using compassionate and collaborative skills with families would be beneficial.

As was noted by Beatson (2008), the importance of cultural sensitivity within the provision of compassionate care should not be overlooked. An approach that incorporates cultural humility on the part of the behavior analyst is multifaceted, and the complexities involved are beyond the scope of this article. Cultural considerations, however, will be paramount to an effective collaborative approach, and further exploration of this literature base is encouraged (see Beaulieu et al., 2018; Conners et al., 2019; Fong et al., 2016; Fong & Tanaka, 2013).

### **Compassionate, Collaborative Approaches Within Behavior Analysis**

In an effort to understand the ways in which compassionate, collaborative care contributes to improved outcomes and treatment adherence, clinicians and researchers within the field of behavior analysis are beginning to evaluate the present performance of behavior analysts as it relates to family-centered practices. A recent article by Taylor et al. (2018) discussed the results of a survey in which 95 caregivers responded to statements about their interactions and experiences with

BCBAs. Although BCBAs’ conduct related to child-specific inquiries was rated highly (e.g., 90.53% agreed that “the behavior analyst acknowledges and expresses appreciation of my child’s strengths,” and 84.21% of caregivers agreed that “the behavior analyst cares about my child”), other areas within the survey, such as the BCBAs’ tendency to interact in a collaborative and compassionate manner, were not highly endorsed. For example, only 61.1% of caregivers reported that “the behavior analyst regularly asks me if I am happy with the way things are going with my child,” 58.9% of caregivers agreed that “the behavior analyst compromises with me when we do not agree,” and 51.06% agreed that “the behavior analyst cares about including all of my children.” Research from other disciplines (e.g., Beach et al., 2006; Hojat et al., 2011) suggests that empathic and collaborative interactions could have a meaningful impact on the experiences of the people who receive behavior-analytic services, as well as on their adherence to recommendations and outcomes. These results demonstrate a need within the discipline to further examine ways to improve relationship building.

For over 20 years, researchers have expressed concerns about behavior analysts using inaccessible language with consumers and the impact this has on client–clinician relationships (Bailey, 1991; Becirevic et al., 2016; Critchfield et al., 2017b; Lindsley, 1991; Neuman, 2018). In a series of studies examining the emotional effect of technical jargon, Critchfield and colleagues found that technical jargon was less preferred by the general public than everyday terms (Becirevic et al., 2016; Critchfield et al., 2017a b; Critchfield & Doepke, 2018). Furthermore, technical terminology has been referred to by the general public as harsh, abrasive, difficult to understand, and awkward sounding (Bailey, 1991; Becirevic et al., 2016; Critchfield et al., 2017b; Neuman, 2018). The use of technical terminology is directly correlated to compassionate and collaborative care, as many of the recommendations for improving compassion and collaboration are forms of vocal and nonvocal verbal behavior.

Skinner (1957) asserted that verbal behavior is only effective if it is reinforced by the listener. The audience is therefore critical to occasion certain responses—in this case, technical terminology or everyday terms. Behavior analysts’ continued use of technical terminology in the presence of audiences that cannot reinforce this behavior must, therefore, be maintained by other variables. One such variable may be a lack of empirical data about the impact of everyday terms on treatment fidelity and effectiveness (Neuman, 2018). A motivating operation (MO) for precise operational definitions that focus on the causal relations between behavior and the environment and avoiding the mentalistic constructs that are so prevalent in everyday language may be other contributing variables (Hineline, 1980; Neuman, 2018). The MO for precision may be established by a reinforcement history from graduate programs that shapes the use of precise technical terminology

(Taylor et al., 2018). Taken together, these variables may compete with the audience control that non-behavior analysts should exert on verbal behavior, leading to the ongoing use of technical terminology that may interfere with collaborative relationships.

As has been shown in the medical literature, adherence to programming may be impacted by a number of aspects related to collaboration. Improved adherence and outcomes can be demonstrated through improvement of physician–patient relationships (Beach et al., 2006; Kelley et al., 2014). If behavior analysts are not adept at engaging with families in ways that promote trust, mutual respect, and a collaborative environment, then adherence to treatment procedures may be hindered. The jargon that is used by behavior analysts when interacting with families may be experienced as inaccessible because much of the terminology may not correspond with the typical vernacular that is used by the general public when describing human behavior (Neuman, 2018). For example, Friman (2006) contended that the standard definition of contingent reinforcement, “an increase in the probability of a behavior that results from a consequential relation between behavior and certain environmental events” (p. 109), is challenging for any non-behavior analyst to understand. Furthermore, in a study of behavior-analytic terms and their emotional overtones, Critchfield and colleagues (2017b) found that the word “reinforcement” had a neutral mean rating of emotional connotation, and the word “contingency” was found to have an unhappy connotation. Friman asserted that the use of colloquial terms, such as “reward” and “relief,” to define the two major types of contingent reinforcement—positive and negative reinforcement, respectively—could be readily understood by the general public and, with the addition of information about response magnitude (in everyday language), could be used without a loss of precision. As Friman modeled in these recommendations, behavior analysts need to focus on skill sets related to improving client–clinician relationships, in the way the medical profession has done, to position the field of behavior analysis to improve care.

Beck et al. (2002) identified the importance of compassionate care in improving treatment outcomes. They determined that impactful components of compassionate care included verbal responses, such as offering support and giving explanations. Consequently, if behavior-analytic terms cannot be understood by or are perceived by clients as harsh and difficult to understand, these will be direct barriers to successful collaboration and outcomes with these clients. Behavior analysts should also carefully consider aspects of the language they use (word choice, humor, body language) within the context of cultural differences. As mentioned previously, social interactions vary across cultures (including nationality, religion, individual or family culture, and any other culture relevant to an individual’s learning history). A strong compassionate and collaborative approach will not only take these variables into

account but also help promote better outcomes through improved treatment integrity and an increased likelihood of adherence to plans.

Given the considerations discussed previously, it is evident that practitioners in the field of behavior analysis would benefit from increased support and training in the area of collaborative skills. The greater presence of empirical literature in other disciplines in this domain displays that this challenge is particularly relevant to the field of ABA. Additionally, in a 2019 survey of behavior analysts, LeBlanc et al. found that behavior analysts with training in other human service professions indicated that they received formal training specific to compassion, empathy, and therapeutic relationships in 100%, 77%, 42%, and 33% of their social work, psychology, education, and counseling degrees, respectively. On the other hand, only 28% of behavior analysts reported receiving formal training in these areas within their behavior-analytic coursework. The field of behavior analysis has the opportunity to increase treatment outcomes and adherence to behaviorally based plans and generally improve the perception of ABA in an ever-increasing area of need; thus, the field must begin to prioritize this work.

## Improving Compassionate, Collaborative Approaches in Behavior Analysis

In response to the challenges that have been identified in our field, we created the Compassionate Collaboration Tool (Table 1), which we believe could be used in a number of ways as a means to improve compassionate, collaborative treatment by behavior analysts. For example, the tool may be used as a self-evaluative checklist for clinicians interested in reflecting on their own approaches with families. Taken further, we recommend that the Compassionate Collaboration Tool be considered as a basis for training practitioners on their use of family-centered behavior-analytic treatment, serving as both a guide to identify specific skills to improve and a procedural fidelity checklist to assess the consistent implementation of these skills, particularly with families. Further detail regarding the use of the tool in each of these capacities is provided below. The Compassionate Collaboration Tool contains 25 skills that have been shown to be effective in applied behavior-analytic research and research in related fields in improving treatment outcomes, treatment adherence, and clients’ perceptions of service providers (Beck et al., 2002; Coulehan et al., 2001; Fong et al., 2016; Helton & Alber-Morgan, 2018; Neuman, 2018; Platt et al., 2001; Shelton & Stepanek, 1994). Each item is scored on a 3-point scale, with 3 indicating that the clinician always engages in this skill, 2 indicating that the clinician sometimes engages in this skill, and 1 indicating that the clinician never engages in this skill.

**Table 1** Compassionate Collaboration Tool

Please respond to the following questions using a 3-point rating scale:

1 – *Not demonstrated / not observed*

2 – *Sometimes demonstrated / some missed opportunities*

3 – *Consistently demonstrated / observed during all opportunities*

### Collaborative Approaches

Did the clinician incorporate **family/individual client input** when identifying **objectives/instructional** targets or procedures?

Actively solicited input from the family about preferences/priorities for targets (“What is important to you to teach?”) 1 2 3

Actively solicited input from the family about preferences/priorities for teaching procedures (“How comfortable are you with the procedures we’ve discussed?”) 1 2 3

Discussed the rationale for selected targets 1 2 3

Ensured the rationale is aligned with the family’s input 1 2 3

Asked questions about the family’s values relating to independence (self-feeding, dressing, staying home alone, etc.) 1 2 3

Did the clinician incorporate **family/individual client input** when identifying **behavior reduction** targets or interventions?

Actively solicited input from the family about preferences/priorities for targets (“What is important to you to change?”) 1 2 3

Actively solicited input from the family about preferences/priorities for behavior-change procedures (“Which intervention are you most comfortable with?”) 1 2 3

Discussed the rationale for selected targets 1 2 3

Ensured the rationale is aligned with the family’s input 1 2 3

### Language and Communication

Did the clinician use accessible **language** when interacting with the family/individual client?

Used precise, everyday language (described concepts precisely without the use of jargon) 1 2 3

Defined and explained behavior-analytic jargon (if used) 1 2 3

Avoided terms that may have negative connotations such as “extinction” or “discrimination” 1 2 3

Used vocabulary that is matched to the family’s/individual’s repertoire 1 2 3

Did the clinician use **verbal communication** strategies associated with positive interactions and client satisfaction?

Asked questions about general family functioning and individual members of the family 1 2 3

Discussed information unrelated to the client before beginning clinical work (used small talk to establish rapport) 1 2 3

Asked about the family’s/individual client’s experience of the challenging situation for which support is sought 1 2 3

Engaged in framing/sign posting (“Let me see if I have this right . . .” “Sounds like . . .”) 1 2 3

Reflected the content (“It sounds like you are worried that Billy can’t express himself.”) 1 2 3

Identified and calibrated the emotion (“I’m hearing that you don’t know what to do when you’re in public and he acts up.”) 1 2 3

Requested and accepted correction (“Did I leave anything out / miss anything?”) 1 2 3

Solicited questions 1 2 3

Used “do” instead of “do not” statements 1 2 3

Provided hope to the family/individual through discussion of potential positive outcomes 1 2 3

Did the clinician use **empathic behaviors** that communicate prioritization of the family’s/individual client’s perspective?

Used nonvocal behavior that is matched to the family’s/individual’s interactions, personal space, and eye contact 1 2 3

Engaged in active/attentive listening (nonverbal and paralinguistic skills, “mm-hmm,” nodding, mirroring facial expressions, appropriate body language) 1 2 3

Refrained from interrupting 1 2 3

Oriented toward the speaker (face-to-face orientation as opposed to a 45° or 90° angle) 1 2 3

Maintained open body posture (uncrossed arms, leaning forward as opposed to back) 1 2 3

As we have discussed throughout this article, the importance of conveying compassion and practicing collaboration in behavior-analytic practice is essential. It is also essential that practitioners of behavior analysis maintain a worldview rooted in the science of behavior analysis. Consequently, although it is imperative to solicit input from clients and, whenever possible and appropriate, incorporate this input into

treatment plans, behavior-analytic treatment must maintain adherence to procedures that are conceptually systematic and empirically supported. Schreck et al. (2016) found that behavior analysts who responded to a survey indicating that they use ineffective/harmful treatments reported that their choice to do so was influenced by clients/parents. Consequently, the importance of behavior analysts prioritizing and maintaining

adherence to their ethical code (BACB, 2016) when collaborating with families is paramount. Behavior analysts are encouraged to consider this important balance as they review and use the rubric shared here.

### Self-Evaluation

Fong et al. (2016) discussed the value of cultural self-awareness as part of developing behavior analysts' ability to effectively collaborate with clients from different cultures. One method of improving self-awareness highlighted by Fong et al. was the use of self-evaluation. In the pursuit of more effective collaboration skills, the benefits of self-awareness and self-evaluation can similarly be argued.

Dymond and Barnes (1997) defined self-awareness as discrimination of one's own behavior. Responding discriminatively to one's own behavior is established through the verbal behavior of a community that asks questions about a person's internal thoughts and feelings (Skinner, 1953). Consequently, questions about compassionate skills can be a first step toward self-awareness for behavior analysts because they establish a verbal repertoire that is needed for discrimination. In other words, by having the verbal repertoire to label compassionate skills in the environment, behavior analysts become increasingly capable of tacting when they are engaging in effective collaboration.

Skinner (1953) discussed methods of self-control including the method of changing the stimulus, which he described as presenting oneself a stimulus to change the probability of a particular response. The use of a tool, such as the one presented here, as a self-presented prompt could change the probability of engagement in more compassionate interactions with clients. By reviewing this tool prior to interactions with families, the behavior analyst could essentially provide a self-prompt for engaging in the particular behaviors outlined.

Self-evaluation goes beyond self-awareness as, in addition to discriminating one's own behavior, the individual assesses their behavior in relation to a predetermined criterion. Self-evaluation has been shown to be an effective self-management intervention to increase a broad range of appropriate behaviors (e.g., Carr et al., 2014; Sainato et al., 1990). The tool presented here can be used for self-evaluation by comparing one's performance following collaborative interactions with the skills outlined in the tool. Observed improvements in behavior during this self-evaluation could function as reinforcement to maintain both the use of the tool for self-evaluation and engagement in compassionate, collaborative skills.

### Training Tool and Procedural Fidelity Checklist

Unfortunately, increased self-awareness and the use of this type of tool as both a prompt and reinforcement in the form of self-evaluation may not be sufficient to significantly

increase engagement in compassionate and collaborative behaviors with families. Social control and group control often establish powerful contingencies and may be necessary to change behaviors that have a long history (Skinner, 1953). Accordingly, the Compassionate Collaboration Tool could be used as a basis for systematically training clinicians to increase their engagement in compassionate treatment. For example, after a behavior analyst's current level of compassionate, collaborative care is assessed (e.g., soliciting input from a family, engaging in active and empathic listening), these specific skills could then be targeted as skills to improve using established training procedures.

Behavioral skills training (BST) is a well-established method of training that has been successfully used to train a variety of individuals, such as direct care staff, teachers, parents, and students, on many skills. BST includes four components: instructions, modeling, rehearsal, and feedback (Ward-Horner & Sturmey, 2012). BST and modified versions of BST have been used to successfully improve staff performance on a number of skills, including discrete-trial teaching (Sarokoff & Sturmey, 2008) and the implementation of single-case design research (Love et al., 2013). Hassan et al. (2018) used BST and in situ training to train parents of children with ASD to use BST to support their child's context-specific social skills. In clinical settings, pyramidal models have been used to train staff on the implementation of BST skills for the purpose of training others (Parsons et al., 2013). Given the variety of skills that have been successfully taught using BST, it follows that skills relevant to compassionate and empathic practices could also be separated into component parts and explicitly taught using BST. Following systematic training procedures, the Compassionate Collaboration Tool could serve as a procedural fidelity checklist to ensure the maintenance of family-centered clinical skills.

As behavior analysts strive to become more compassionate and empathic collaborators, it will be vital that the field of behavior analysis operationalizes the specific skills necessary for successful interpersonal situations. The tool presented in this article defines skills that may be necessary in these situations, as supported by research evidence in the field of behavior analysis and related fields. Investigations of the impact, reliability, and validity of this tool in practice could lead to a more refined set of items that more precisely aligns with the needs of behavior analysts specifically.

An additional area of needed investigation is the relative impact of the different uses of the tool—as a self-evaluation, treatment integrity check, and training road map. Finally, training protocols that task analyze these skills will be required to establish consistent operational definitions for interpersonal skills. These task analyses can then be used to teach compassion through evidence-based instructional methods, such as BST. In combination with survey questions provided to clients, such as those created by Taylor et al. (2018), this

could provide a systematic check that the skills identified are relevant to improving compassionate practice and effective collaboration. To our knowledge, there are no existing tools or checklists that can be used to reflect on observable behaviors related to compassion, either in the behavior-analytic literature or in related human service fields.

## Conclusion

The application of interventions based on the science of human behavior can change the lives of individuals and their families. We have the opportunity and obligation as behavior analysts to call upon the applied domain of our science to effectively collaborate and compassionately interact with those who engage with our services. By examining the research of other helping professions (i.e., medicine, nursing, psychology), as well as existing research within our own field, we can begin to identify areas of need within the field of behavior analysis regarding compassion and collaboration. Enhancing the soft skills of behavior analysts will allow these clinicians to effectively engage with nonbehavioral stakeholders, thereby leading to the positive outcomes described within this article. Existing literature has demonstrated that these skills are important to service delivery (e.g., Hojat et al., 2011), that we are deficient in the demonstration of these skills according to consumer surveys (Taylor et al., 2018), and that these skills are not yet covered in teaching and training programs within our field (LeBlanc et al., 2019). This article is an extension of the existing literature because we have formulated a tool to evaluate the compassionate and collaborative skill set of clinicians that can be used to evaluate performance in role-played or actual interactions with clients. It is our hope that this tool can be used for teaching, training, and supervision in this crucial area of skill development. Within this article, we described three possible uses for the Compassionate Collaboration Tool (i.e., as a self-evaluation, as a treatment fidelity checklist, and as a training guide). Although it is important to use the Compassionate Collaboration Tool for the purposes described previously, it will also be important to test the reliability and validity of the tool itself. We are hopeful that practitioners of behavior analysis will recognize these areas of need within our field, explore the utility of the tool offered, and continue to identify means to empirically assess and improve our own performance in the provision of compassionate behavior-analytic treatment. Ultimately, it is vital that behavior analysts prioritize and improve the training and supervision of students and supervisees by integrating compassionate care into the identified skill set of behavior analysts. These skills are essential to building effective rapport, to ensuring that those we serve feel heard and understood, and to working toward meaningful outcomes that are valued by consumers.

## Declarations

**Conflict of interest** The authors declare that they have no conflict of interest.

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