



Compassionate Care in Behavior Analytic Treatment: Can Outcomes be Enhanced by Attending to Relationships with Caregivers?

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Abstract

The practice of behavior analysis has become a booming industry with growth to over 30,000 Board Certified Behavior Analysts (BCBAs) who primarily work with children with autism and their families. Most of these BCBAs are relatively novice and have likely been trained in graduate programs that focus primarily on conceptual and technical skills. Successfully working with families of children with autism, however, requires critical interpersonal skills, as well as technical skills. As practitioners strive to respond efficiently *and* compassionately to distressed families of children with autism, technical skills must be balanced with fluency in relationship-building skills that strengthen the commitment to treatment. The current article provides an outline of important therapeutic relationship skills that should inform the repertoire of any practicing behavior analyst, strategies to cultivate and enhance those skills, and discussion of the potential effects of relationship variables on treatment outcomes.

Keywords Autism · Collaboration · Compassion · Empathy · Family · Parents · Perspective taking · Therapeutic relationship

Behavior analysis and autism treatment have grown significantly over the last 10 years. There are now 299 institutions offering verified course sequences in behavior analysis and over 30,000 certified behavior analysts practicing worldwide (Behavior Analyst Certification Board [BACB], n.d.; Carr & Nosik, 2016). Additionally, state-initiated insurance mandates have allowed an increasing number of families to access behavior-analytic interventions (Autism Speaks, 2017). As our field continues to grow, we must identify the variables that

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will most likely lead to a family choosing behavior-analytic services for their children and remaining engaged in behavioranalytic treatment over time (Croen, Shankute, Davignon, Massolo, & Yoshida, 2017). In other health care industries (e.g., medicine and mental health services), therapeutic relationship skills such as empathy and compassion are highly valued and have been found to be correlated with patient satisfaction, adherence to treatment, enhanced quality of information gathered from patients, and improved clinical outcomes (Derksen, Bensing, & Lagro-Janssen, 2013; Hojat et al., 2011; Kelley, Kraft-Todd, Schapira, Kossowsky, & Riess, 2014; Kirby, Tellegen, & Steindl, 2017; Riess, 2017; Weiss et al., 2017). This research is primarily correlational, with heavy reliance on self-report and rating scales; however, findings from other health care fields indicate that a positive clinical relationship can positively impact a number of outcome variables. For example, Hojat et al. (2011) found that patients whose physicians were rated high on the Jefferson Scale of Empathy were more likely to have better clinical outcomes related to their management of diabetes. Although behavior analysts' empirically derived technical skills will remain essential to ensure client outcomes, those methods do not exist separately from relationships with clients and their caregivers. Behavior analysts' overall competencies may be enhanced by direct training in interpersonal skills and strategies for building relationships with families. Enhanced relationship skills

may lead, in turn, to more effective partnerships with caregivers, increased and sustained engagement in treatment and adherence, and improved clinical outcomes.

More than 20 years of supervising and training new behavior analysts has convinced the authors that practicing behavior analysts do not always establish or sustain collaborative and caring relationships with caregivers. Anecdotally, the authors have observed that family dissatisfaction with the behavior analyst often stems from deficient relationship skills (e.g., the behavior analyst seeming hurried or unavailable or not listening to parental concerns). In fact, behavior analysts are more likely to have an ethics complaint filed against them by a parent or consumer than by colleagues or supervisors (BACB, 2018). The majority of these ethics complaints are less about what the behavior analyst did and more about how he or she did it. As Tulgan (2015) noted, someone is more likely to be hired for his or her technical skills and fired for problems in the skills that directly involve relating to others. A behavior analyst's failure to practice essential relationship skills may have deleterious effects on treatment, including clients' failure to support and implement programming, requests for reassignment or replacement of treatment team personnel, or withdrawal from behavior-analytic treatment altogether. In the aggregate, negative impacts on individual treatment have collateral consequences for providers, agencies, and the field at large.

Consider, for example, a behavior analyst training a parent to implement a bedtime extinction protocol that requires the parent to ignore their child's cries and to spend most of the night redirecting the child to bed. The parent's acceptance of, and adherence to, treatment is likely to be influenced by several variables (Allen & Warzak, 2000; Baker & LeBlanc, 2011; Vazquez, Fryling, & Hernández, 2018). Although the proven clinical efficacy of the procedure might initially convince the family of the intervention's value, follow-through may be enhanced by a compassionate approach to identifying and implementing the intervention. By engaging the parent in conversation and actively listening to the parent's concerns, the behavior analyst may proactively identify potential barriers to adherence (e.g., concern about other children's sleep being disrupted, being fatigued at work the next day, or not being able to tolerate crying). This proactive engagement may enable a response that is both warm and respectful, conveying an understanding and appreciation of the parent's concerns. From this point of relational connection, the parent and provider can proceed collaboratively to develop a plan that will maximize treatment integrity and the intervention's outcomes. Successful implementation of the intervention may, in turn, bolster the confidence of the parent, as well as the behavior analyst, and increase the caregiver's overall trust and investment in ongoing treatment.

Compassionate Care: Definitions and Responses

Mental health (e.g., psychology, social work) and general health practices (e.g., medicine, nursing, palliative care) have identified certain clinical relationship variables that fall under the rubrics of empathy and compassion. Constructs of sympathy, empathy, and compassion are routinely confused or conflated. Although there are various definitions outlined in the non-behavior-analytic literature (e.g., Strauss et al., 2016), these three constructs are believed to comprise distinct responses and to have differential effects on consumers of health care (Goetz & Simon-Thomas, 2017; Sinclair et al., 2016). Sympathy involves feeling sorry for another person's pain and sorrow but does not necessarily imply a shared experience of the other's pain. Some studies have identified that patients experience sympathy negatively and associate sympathy with pity (Sinclair, Beamer, et al., 2016). Empathy, on the other hand, is "walking in another's shoes" and requires perspective taking: one must perceive the experience from the other's perspective and have an understanding of the person's emotional response within that experience. Empathy involves both a cognitive component (identifying the emotion being displayed by the person) and an affective component (appreciating and experiencing the person's emotional response). One must be aware of and understand the other person's situation, perspective, and feelings; communicate that understanding; and check for accuracy (Goetz & Simon-Thomas, 2017). For example, if a parent expresses sadness about having a child with autism, a clinician would empathize with the parent by recognizing the parent's pain and sadness by taking the parent's perspective, acknowledging and confirming the feelings expressed by the parent, and genuinely appreciating and experiencing the parent's pain. Importantly, the empathic response does not presume or require that the parties involved have actually participated in the same experience. Instead, the clinician must take the perspective of the parent and draw upon his or her own unique experiences of loss and distress to inform his or her understanding of the parent's experience. Put differently, empathy is the act of being in touch with another's personal experience by relating it to one's own.

Compassion takes empathy a step further, by bringing action to the empathic response. In this regard, compassion converts empathy into an act aimed at the alleviation of suffering. Lown et al. (2014) described compassion as "the recognition, empathic understanding of and emotional resonance with the concerns, pain, distress or suffering of others coupled with motivation and relational action to ameliorate these conditions" (p. 3). For example, a clinician may empathize with a parent, who is sad and frustrated that her son is not making the progress she had hoped, by listening attentively to the parent, taking the parent's perspective, acknowledging and accepting the parent's feelings, and allowing herself to feel what the parent is feeling in the moment. Compassionate care by the clinician would aim to reduce the parent's sadness and frustration over time, perhaps by assisting the parent in reorienting the goals for her child, helping her be more compassionate with herself as a parent (Gould, Tarbox, & Coyne, 2017), or by helping the parent to acknowledge and appreciate incremental gains. A clinician rushing to fix the problem, on the other hand, may undermine or invalidate the parent's expression of sadness and frustration, potentially jeopardizing investment in treatment. By applying techniques of compassionate care, a behavior analyst can identify and tact when others are suffering through the process of perspective taking, tact their own personal experiences and how the observed suffering may relate to his or her own, and then act intentionally to alleviate the suffering of the caregiver.

There are few behavior-analytic definitions of compassion and empathy. Perspective taking, however, which is necessary for empathic and compassionate responding, is rooted in relational frame theory (RFT; Barnes-Holmes, Foody, Barnes-Holmes, & McHugh, 2013; Vilardaga, 2009) and clinically demonstrated in acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 2012; Tirsh, Schoendorff, & Silberstein, 2014). According to RFT, perspective taking is possible through a series of interpersonal relations of three deictic frames: I-you, here-there, and now-then (see Barnes-Holmes et al., 2013). These relations allow one's perspective relative to another's. For example, a behavior analyst interacting with a parent who is crying as she is describing the recent diagnosis of her child must be able to respond to cues for discrimination of the likely private event of the parent, as well as the parent's emotional experience (i.e., sadness, despair). This occurs through a series of trained, coordinated relations (e.g., "If I were you, I would be experiencing. .."). The clinician, having experienced loss in her own past, has learned to act in accordance with what the parent is experiencing as distinct from her own experience but related. For example, the clinician may engage in covert verbal behavior, such as "If I were you, I would be experiencing sadness," because this experience is similar to one that this clinician has had in the past. Thus, according to proponents of RFT, compassionate care of the clinician, to alleviate suffering of the parent, requires a repertoire of deictic framing (Tirsh et al., 2014).

A Survey of Caregivers

Having observed the impact of relational competency anecdotally, we conducted a survey of parents of children with autism regarding their impressions of behavior analysts' relationship skills. The survey was created using Survey Monkey and was distributed through e-mail lists, Facebook, and selected autism advocacy organizations. These distribution targets

were identified by doing a Google search of potential parentdirected autism e-mail lists to post the survey. In addition, the parents who encountered the link to the survey could distribute it to other parents. No behavior analysts were used to distribute the survey to minimize potential bias in distribution (e.g., distribution to families expected to rate their behavior analysts highly) or perception of social pressure for positive ratings. Ninety-five completed surveys were received and analyzed. Due to the public nature of the distribution targets and the potential for participant distribution, it is unclear how many individuals saw the link and it is not possible to calculate a return rate. However, 95 is clearly only a very small percentage of all parents with children with autism that receive or have received applied behavior analysis services. Survey items sampled parent perception of relationship variables (e.g., "The behavior analyst compromises with me when we do not agree."). The items were scored on a 1 (strongly disagree) to 5 (strongly agree) scale, and the scores were reversed for negatively worded items so that higher scores always reflected better parental impression. The full content of the survey can be obtained from the first author.

Tables 1, 2, and 3 present the results of the survey with questions grouped into the three areas: listening and collaboration, empathy and compassion, and "negative" behaviors of the behavior analysts that could contribute to problems in the therapeutic relationship. The mean and standard deviation are presented for each item with questions ordered from lowest to highest mean. In addition, the far-right column presents the percentage of respondents who indicated agreement with the question at some level of intensity (i.e., agree, strongly agree). This percentage agreement index is often used as a supplemental analysis for 5-point scale satisfaction surveys because of the pervasiveness of positive response bias on satisfaction surveys. That is, most people respond positively if possible, and neutral responses (i.e., score of 3) indicate that the respondent could not agree with the statement at any level. Thus, average scores below 4 are generally considered problematic because, on average, respondents were unwilling to agree with the statement. Items with identical mean scores could have differing percentage agreement scores due to the individual responses collapsed into the mean (see Table 1's first two items and eighth and tenth items as examples). Items with mean scores below 4 or percentage agreement scores below 75% could be interpreted as behaviors worth targeting for improvement (Sauro, 2011).

Table 1 provides the scores for questions about behaviors related to listening and collaboration. Of the 15 items, 8 of them, or approximately half, have mean scores of 4 or higher and percentage agreement scores above 75%. Respondents indicated that behavior analysts rate high on listening to concerns in the first meeting (mean = 4.58; 93.7% agree) and protecting confidentiality (mean = 4.55; 90.5% agree). However, compromising during a disagreement (mean =

Table 1 Items that represent listening and collaboration in the therapeutic relationship

Question	Mean (SD)	Percentage Agree
The behavior analyst regularly asks me if I am happy with how things are going with my child.	3.69 (1.20)	61.1
The behavior analyst compromises with me when we do not agree.	3.71 (1.06)	58.9
The behavior analyst clarifies roles and expectations, both mine and his or hers.	3.83 (1.20)	65.3
The behavior analyst regularly communicates and follows up with me about recent changes to programs.	3.84 (1.21)	68.4
The behavior analyst regularly modifies procedures and skill targets based on my concerns.	3.89 (1.15)	68.4
The behavior analyst collaborates and communicates with other members of my child's treatment team (e.g., school, other therapies).	3.95 (1.18)	71.6
The behavior analyst is effective at identifying skills and reducing behavior that meet my family's needs.	3.96 (1.23)	71.6
The behavior analyst explains the rationale for his or her treatment decisions and procedures.	4.07 (1.04)	80.0
When I have concerns about my child's program, the behavior analyst actively listens to my concerns without being defensive.	4.08 (1.16)	76.8
The behavior analyst makes me feel like a valued member of my child's treatment team.	4.09 (1.20)	75.8
The behavior analyst considers my concerns and collaborates with me when developing problem-behavior intervention plans.	4.16 (1.01)	78.9
The behavior analyst considers the input of my child when appropriate.	4.19 (.94)	77.9
The behavior analyst considers my concerns and collaborates with me when developing programs for learning new skills.	4.19 (1.05)	80.0
The behavior analyst protects confidentiality.	4.55 (.79)	90.5
When first meeting me and my child, the behavior analyst listened to my concerns about my child.	4.58 (.73)	93.7
Average	4.05 (1.08)	74.6

Likert scoring for each item represented 5 (strongly agree) to 1 (strongly disagree)

Table 2 Items that convey empathy and compassion in the therapeutic relationship

Question	Mean (SD)	Percentage Agree
The behavior analyst regularly asks how I am doing.	3.46 (1.25)	53.68
The behavior analyst acknowledges his or her own mistakes.	3.54 (1.37)	55.79
The behavior analyst cares about including all of my children.	3.62 (1.22)	51.06
The behavior analyst reassures me that things will get better.	3.78 (1.12)	65.26
The behavior analyst acknowledges when treatment is not working.	3.81 (1.17)	65.26
The behavior analyst seems to have an understanding of what it is like for me to have a child with autism.	3.85 (1.31)	68.42
The behavior analyst understands when I have challenges implementing protocols.	3.86 (1.12)	69.47
The behavior analyst seems to understand my fears and anxiety about my child's future.	3.87 (1.05)	69.47
The behavior analyst is patient with me when training me to implement protocols.	3.88 (1.14)	68.42
The behavior analyst understands what I struggle with in parenting my child.	3.91 (1.19)	72.63
The behavior analyst understands how having a child with autism impacts our family dynamics.	3.91 (1.19)	72.63
The behavior analyst acknowledges my feelings when discussing difficult or challenging circumstances.	3.92 (1.12)	72.63
The behavior analyst respects my cultural values and beliefs.	3.95 (1.01)	67.02
The behavior analyst is compassionate and nonjudgmental.	3.97 (1.19)	72.63
The behavior analyst cares about my capacity to parent my child.	3.97 (1.08)	70.53
The behavior analyst is optimistic about my child's capability and potential progress.	4.23 (.97)	87.37
The behavior analyst is friendly, genuine, and warm.	4.31 (.98)	84.21
The behavior analyst cares about my child.	4.35 (.88)	84.21
The behavior analyst cares about the progress of my child.	4.40 (.90)	88.42
The behavior analyst acknowledges and expresses appreciation of my child's strengths.	4.44 (.78)	90.53
The behavior analyst acknowledges and celebrates my child's accomplishments.	4.48 (.77)	89.47
Average	3.98 (1.08)	72.34

Likert scoring for each item represented 5 (strongly agree) to 1 (strongly disagree)

Question	Mean (SD)	Percentage Agree
The behavior analyst seems to have his or her own agenda about the direction of my child's program.	3.64 (1.35)	24.2
The behavior analyst underestimates my child's ability.	3.80 (1.29)	21.1
The behavior analyst focuses too much on my child's challenging behavior.	3.80 (1.17)	16.1
The behavior analyst failed to communicate with me.	3.81(1.28)	18.9
The behavior analyst focuses too much on my child's deficits.	3.86 (1.12)	14.7
The behavior analyst has an authoritarian demeanor rather than a collaborative one when discussing decisions about my child's program.	3.93 (1.34)	21.1
The behavior analyst is too busy to discuss things about my child's program that are important to me.	3.94 (1.18)	15.8
The behavior analyst often seems distracted during meetings.	4.00 (1.11)	10.5
The behavior analyst let his or her opinions of other professions or other treatments interfere with our relationship.	4.00 (1.21)	16.0
The behavior analyst interrupts me during meetings about my child.	4.18 (1.01)	8.4
The behavior analyst uses too much technical language that I don't understand.	4.21 (.95)	7.4
Average	3.92 (1.18)	15.8

Table 3 Items that may contribute to problems in the therapeutic relationship

Likert scoring was reversed for each of the negatively worded items and represented 1 (strongly agree) to 5 (strongly disagree)

3.71; 58.9%), inquiring about satisfaction (mean = 3.69; 61.1 % agreement), and role clarification (mean = 3.83; 65.3% agree) represent areas with need for improvement, as the items' average scores are below 4 (i.e., on average, respondents did not agree with these statements).

Table 2 provides the scores for items that convey empathy and compassion. Of the 21 items, only 6 have a mean score of 4 or above and an agreement score of greater than 75%. Respondents indicated that behavior analysts rate high on caring about, celebrating, and appreciating the child's progress and strengths (all items with means above 4.2 and over 84% agreement). However, the majority of the items represent areas for improvement, with the lowest scores related to demonstrating caring about the entire family, acknowledging mistakes or treatment failures, and being patient and reassuring.

Table 3 provides the scores for items that reflect behavior that could harm a therapeutic relationship. Only 4 of the 11 items had a mean score above 4 (i.e., technical language/jargon, interrupting, interfering opinions about other disciplines, and distraction during meetings). The majority of items had a mean score below 4 (i.e., on average, respondents did not agree with the statement). None of the items had 25% or greater agreement (i.e., the reciprocal of the 75% desired level on positive items), indicating that most respondents scored these items as a 3 (neutral). Behavior analysts having their own agenda about programming (24.2 % agreement), having an authoritarian demeanor when discussing programming (21.1% agreement) had the highest percentage agreement scores and represent the biggest areas of concern.

As the tables illustrate, behavior analysts are currently performing relatively well on some skills in each of the three sampled areas. This is encouraging news. On the other hand, the survey revealed a number of areas where behavior analysts can, and arguably should, improve. Although these results must be interpreted cautiously given the small sample sizes, there is evidence that at least some behavior analysts may have deficits in a number of core relationship skills. Given these possible deficits, and the growing research in other health care industries indicating the potential importance of therapeutic relationship skills (Kelley et al., 2014), we propose that training programs for behavior analysts consider teaching skills in these areas. Practitioners may benefit professionally from such competencies, and service outcomes may be improved by compassionate care's collateral impacts. Moreover, targeted training in relationship skills is consistent with the BACB's ethics code and training requirements.

Behavior Analyst Ethics Code and Training Requirements

The *Professional and Ethical Compliance Code for Behavior Analysts* (the Code; BACB, 2016) and the BACB Task List (Task List; BACB, 2014) identify the importance of the collaborative relationship with the family and client. The Task List includes items related to collaboration with other professionals (H-9) and recommendations of intervention goals and strategies based on factors such as client preferences, supporting environments, risks, constraints, and social validity (H-4). A behavior analyst adept at active listening, demonstrating empathic concern, and compromising will be more likely to identify caregiver preferences and overcome potential constraints to treatment.

The Code speaks both directly and indirectly to the importance of the relationship of the behavior analyst and caregivers. For example, sections 1.05 and 3.04 speak to the importance of clear and effective communication by pointing out that behavior analysis should "use language that is fully understandable to the recipient of those services" (p. 5) and "explain assessment results using language and graphic displays of data that are reasonably understandable to the client" (p. 11). Sections 2.0 and 4.0 also speak to the importance of collaboration with the client, family, and other important people in the environment when planning and implementing treatment. These items specify that the clients should be involved in treatment planning and that the behavior-change program must take into account environmental variables (e.g., family context, preference for treatment), suggesting that a collaborative, rather than expert, model is preferable. Section 4.05 directly refers to the importance of the ongoing collaborative process "throughout the duration of the client-practitioner relationship" (p. 12).

Barriers to Relationship Skills and Compassionate Care

Despite ethical directives related to relationship skills, several factors may contribute to difficulty in building and sustaining effective therapeutic relationships with parents. First, academic training programs in behavior analysis may simply neglect to incorporate training in these skills. For example, Pastrana et al. (2016) identified the most frequently assigned readings of behavior analysis graduate training programs. Of those foundational readings, none directly addressed relationship skills between behavior analysts and clients or caregivers. Additionally, the highly technical training and shaping of verbal precision in graduate programs may lead to overuse of technical jargon that can be off-putting or abrasive (Critchfield et al., 2017) and may lead behavior analysts to be perceived as authoritarian or "expert" rather than collaborative and flexible.

Second, funding sources may unintentionally hamper the development of relationships with families by limiting the number of hours clinicians can spend with families or providing lower reimbursement rates for parent-training activities. These factors may lead behavior analysts to privilege technical aspects of intervention over the development and maintenance of relationships. Additionally, the pressures of time restrictions and heavy caseloads may themselves produce in clinicians the very behaviors that undermine relationship building. For example, the clinician may respond with answers too quickly, interrupt parents when they express concerns about interventions, or end meetings with parents prematurely.

Novice clinicians may fail to understand or reflect on the variety, range, and intensity of emotional responses that parents of children with autism experience (Fiske, 2017). For example, at the time of diagnosis, parents may feel anger, sadness, fear, guilt, and anxiety about who will care for their child once they are gone (Lutz, Patterson, & Klein, 2012; Post et al., 2013). These emotions will invariably affect the parents' responses to and impressions of their child's treatment, as well as their own engagement in training. For example, a father may find emotional responses related to the diagnosis highly aversive and avoid contact with those aversive stimuli. The result may be escape and avoidant behavior around interventions prescribed by the behavior analyst. A behavior analyst who is unfamiliar with or not attending to these emotional responses may respond unskillfully (e.g., blaming parents when treatment integrity is compromised, ceasing treatment), rather than actively addressing those emotional responses and allaying fears that undergird them.

Poor relationship skills may also be attributed to behavior analysts' lack of awareness of the motivation for their own behavior in response to the behavior of a caregiver. Consider, for example, a behavior analyst who receives an angry voicemail from a parent about recent changes in therapist assignment on her son's treatment team. If the parent's anger (e.g., yelling, expressions of disappointment) is aversive to the behavior analyst, he or she may avoid returning the parent's call or terminate future interactions prematurely. In this case, the behavior analyst's inability to control his or her own response eliminates the opportunity to listen to and fully understand the parent's point of view (e.g., the parent worries about the impact of the change on her son's progress) and to acknowledge that the parent's feelings are valid.

A behavior analyst's covert verbal behavior in response to the parent's anger can set the occasion for either relationship building or relationship erosion. When one is mindful of one's covert and overt behavior in response to others and attends to the motivation of one's responses to caregiver behavior, empathy and compassion may occur more readily (Fong, Catagnus, Brodhead, Quigley, & Field, 2016; Hayes et al., 2012). For example, if the behavior analyst's covert verbal behavior is "Ugh, this parent is never satisfied," the behavior analyst may grow progressively less receptive to the parent's expressions of concern. Empathic statements (e.g., "This parent seems upset and is advocating for their child."), on the other hand, may motivate the behavior analyst to collaborate with the caregiver in identifying solutions and allaying fears. Self-awareness can take the form of accurately tacting the experience of discomfort (e.g., "It's difficult for me to experience the parent's anger.") and the potential resulting behavior and consequence (e.g., "I don't feel like calling this parent back, but that will only make it worse."). By reflecting on the experience, the clinician can alter the response (e.g., "Even though it is uncomfortable, I will call the parent back and listen to their concerns."). As Epstein (2017) noted, in speaking about compassionate care as a physician, "mindfulness. .. is observing, understanding and regulating my own emotional reactions so I can reliably sustain presence in the face of a patient's distress-and my own" (p. 131). Importantly, these discrete acts of self-aware responsiveness may shape future interactions in the therapeutic relationship: As the behavior analyst becomes more effective in managing his or her own emotional responses to parental discomfort, the parent may grow to trust the wisdom of the treatment team's decision making.

Relatedly, behavior analysts who do not engage in selfcompassion may have difficulties extending compassion to others (Haves et al., 2012; Neff, 2011). Central obstacles to clinicians' practice of self-compassion include negative selfassessment, disproportionate focus on routine clinical error, and self-critical verbal behavior. A behavior analyst who engages in self-blame ("I can't believe I said that.") may exacerbate the original problem by fixating on the negative impacts ("This parent probably thinks I'm totally incompetent.") and reinforcing the negative covert verbal behavior with selfcriticism ("Maybe I really am totally incompetent."). This noncompassionate thought loop squanders time and energy that could be invested in services or relationship building, could erode future interactions by ascribing thoughts and attitudes to the caregiver that may not exist, and inhibits the practice of compassionate skills and modeling of compassionate interactions for the caregiver.

Other interpersonal factors such as stressors at work and home, general burnout, and poor coping skills can also create barriers to compassionate care. Empathy has been described as "emotional labor," and as Riess (2015) noted, "all labor requires energy resources and conducive environments to optimize results" (p. 51). If a behavior analyst works in an unsupportive environment, or is not engaged in self-care, there will be little motivation to engage in empathy and compassion when interacting with families. Behavior analysts require work environments that value and shape compassionate care of both self and others. As Epstein (2017) discussed in relationship to physicians and compassionate care,

To provide compassionate care, we have to address institutional climate and values . . . Empathy and compassion are doomed to decline if we continue to neglect the emotional lives of physicians, if we fail to provide the conditions under which they can learn to regulate their emotions. (p. 133)

The same can be said of the work environments of behavior analysts.

A step toward overcoming the barriers outlined previously is to provide comprehensive training in core competencies related to compassionate and empathic care. Other health care industries, such as medicine, have identified critical skills in these areas (Derksen et al., 2013; Di Blasi, Harkness, Edzard, Georgiou, & Kleijnen, 2001; Fogarty, Curbow, Wingard, McDonnell, & Somerfield, 1999; Hojat et al., 2011; Karver, Handelsman, Fields, & Bickman, 2006; Lown, 2016; Riess, 2015; Sinclair et al., 2016). Although these studies were conducted in other health disciplines, the findings are instructive for behavior analysts and serve to prompt clinical training programs in relationship skills. Outlined in the following section and in Tables 4 and 5 are core relational responses and curriculum components that may comprise empathic and compassionate care and skills that can help behavior analysts build therapeutic relationships with parents.

Curriculum Recommendations

Published curriculum content for teaching compassionate care and other repertoires for establishing and maintaining successful therapeutic relationships is primarily available from the medical field (e.g., Lown, 2016; Riess & Kraft-Todd, 2014; Windover et al., 2014; Winkle, Schwartz, & Michels, 2017). These curricula offer component skills, along with operational definitions, intervention goals, and resources (see, as an example, Lown et al., 2014). Several curricula offer acronyms or mnemonics that can be useful when training these skills. For example, Riess and Kraft-Todd (2014) propose the mnemonic E.M.P.A.T.H.Y., where the letters represent eye contact, muscles of facial expression, posture, affect, tone of voice, hearing the whole patient, and your response.

Curriculum and training programs for teaching these skills to behavior analysts are nonexistent. There have been a few studies, however, documenting procedures to teach "perspective-taking skills," but these are primarily with individuals with autism (Gould, Tarbox, O'Hora, Noone, & Bergstrom, 2011; LeBlanc et al., 2003). In addition, there is an emerging body of research examining the effects of teaching selfcompassion via ACT to parents of children with autism (Gould et al., 2017) and procedures to teach "rapport-building" skills to clinicians working with children with autism (Lugo, King, Lamphere, & Paige, 2017).

The first two authors independently developed training curricula for their clinical teams at their provider agencies to teach empathy, communication and listening skills, and compassionate collaboration with caregivers (see Tables 4 and 5). Core components include engaging in active listening, collaborating with caregivers, understanding a family's culture, being kind, asking open-ended questions, avoiding technical jargon, and caring for the entire family. The Trumpet Behavioral Health curriculum includes three training modules (see Table 4 for a more detailed view of this curriculum). The first module focuses on understanding the family perspective to establish a more empathic and compassionate framework for the therapeutic relationship. The module includes perspectivetaking exercises and explicit instruction in active listening skills. Self-compassion is targeted by having participants identify their own stressors and the impact of those stressors on the therapeutic relationship. The second module focuses on strategies for establishing and sustaining a strong and collaborative

Table 4 Core components in the trumpet behavioral health curriculum for establishing and maintaining therapeutic relationships with families

Module	Concepts	Activities
Family Perspectives	Rapport, therapeutic alliance, and relationships Viewing the entire family as client, incorporating siblings Understanding stress and the grief process Empathy and perspective taking Making time for the relationship and managing your stress	Identify the current family to focus on throughout the training Reflect on that family's stressors and strengths Reflect on how family stressors and your own have impacted the relationship
Building the Therapeutic Relationship	Strategies for establishing rapport Clarifying roles and expectations to build healthy relationships with boundaries Active listening and caring Seeking input and accepting feedback Focusing on the positive, being likeable and dependable Effective communication Compromise and collaboration Motivating and informing families Seeking input on treatment Admitting faults and mistakes Positive, solution-focused problem solving Positive focus and creating hope Celebrating the child's strengths and gains Recognizing parent skills and efforts	 Avoid dual relationships—practice with ethical ambushes Active listening role-play exercise (reflect, with open-ended questions and open demeanor) Describing procedures and concepts in laymen's terms Identifying priorities role-play exercise Open-ended questions exercise "Focus on the positive" exercise Role-play on authoritative vs. authoritarian communication style
Assessing and Repairing Therapeutic Relationships	 Strategies for improving trust and rapport—reflect and avoid Passing judgment, interruptions, blame, trigger words Jargon Authoritarian demeanor (authoritative and collaborative instead) Strategies for identifying and repairing a damaged relationship Recognizing that there is a problem and apologizing Assessing the relationship—self and other assessment Managing planned and unexpected difficult conversations Reflection and perspective taking 	Difficult conversations role-play Use of the therapeutic relationships self-evaluation

therapeutic relationship (e.g., establishing rapport; compromising; seeking input; sustaining a hopeful, positive focus; recognizing parent efforts; clarifying roles; and seeking and receiving feedback). The third module focuses on assessing the status of the therapeutic relationship and repairing the relationship if necessary. The targeted skills include avoidance of the most common communication and collaboration errors (e.g., judging, interrupting, using jargon, and having an authoritarian demeanor) and strategies for repairing damaged relationships (e.g., having difficult conversations, apologizing, and defusing emotional interactions).

Alpine Learning Group's training program, "Communicating With Parents: Active and Empathic Listening," was developed to teach new teachers and clinicians to engage in effective and empathic listening with parents. The training provides an overview of potentially challenging conversations (e.g., concerns about progress, staffing, and programming; complaints) and how to respond in these contexts. The training outlines potential barriers to listening, as well as the collateral effects when clinicians do not listen well (e.g., breakdown in the relationship). The training focuses on how to listen attentively (e.g., sitting up, making eye contact, not interrupting, paraphrasing) and empathically (e.g., acknowledging the concern) and how to self-monitor emotional reaction to a parent's communication (e.g., staying mindful and attentive to one's own emotional reaction of discomfort during the communication). The overall goal of the training is to bring awareness of the importance of listening with emotional resonance and self-awareness so that positive relationships with caregivers can proceed.

Table 5 provides an outline of a potential training curriculum in skills associated with compassionate care and building therapeutic relationships with caregivers. The curriculum offers a breakdown of component skills, behaviors to monitor, suggestions for evaluation of the skills, and associated resources. Although this curriculum has not been empirically evaluated, it provides a preliminary outline of core subskills that could be used in developing an individualized training curriculum for provider agencies and training programs.

Table 5 Proj	Proposed outline of skills to teach in the area of compassionate care	e area of compassionate care			
	Subskills to Teach	Skills to Monitor	Proposed Activities	Evaluation Measures	Resources
gages in positive social interactions	 Smiles and acknowledges the parent with eye contact and an appropriate greeting. Makes positive comments about the child's behavior. Makes positive comments about the parent. Expresses appreciation for the parent. Provides realistic, hopeful comments about the child's prognosis. Demonstrates general enthusiasm about the direction of the child's prognam. Asks the parent how she or he is doing. 	 Has flat affect. Overly focuses on negative child outcomes. Provides negative feedback to the parent. 	 Role-play activities with supervisor and colleagues. Observe video interactions of good and poor exemplars. Trainee tacts the correct and incorrect interactions. Practice in vivo and videotape interactions. Videos are reviewed by the supervisor and evaluated for the presence of skills. Self-evaluate skill demonstration in video review. 	 Supervisor records presence or absence of skills. Perform a frequency measure of positive comments. Perform a social validity measure of the parent's perception of these skills in trainee. Self-evaluate trainee's impression of his or her skills in this area. Use a rating scale to evaluate another's (e.g., colleague's) impression of the skill in the trainee. 	 Center for Excellence in Healthcare Communication (n.d.) Schwartz Center for Compassionate Healthcare (2014) Windover et al. (2014)
	 Asks the parent if she or he is happy with how things are going. Uses humor when anyworriste 				
Demonstrates empathy	 A conservation when appropriate. Makes eye contact. Makes eye contact. Makes eye contact. Sits up, leans forward, and maintains a positive neutral facial expression. Uses a reassuring tone of voice. Nods his or her head to indicate active listening. Uses vocalizations to indicate active listening. Uses vocalizations to indicate active second on the parent to answer. Paraphrases back what the parent states. Acknowledges and names the parent's feelings (e.g., "You seem discouraged."). Verifies the emotional response as reasonable. Identifics and responds and parent's feeling (e.g., "additional response to the parent's feeling (e.g., "additional response to the parent's feeling (e.g., "ton seem discouraged."). 	 Is distracted by technology, phone, or computer. Interrupts the parent. Jumps to solutions too quickly. Shows distress based on the parent's distress. Redirects or interrupts the parent's emotional response. 	 Role-play activities with supervisor and colleagues. Play audio recordings of parent communication. Trainee tacts the parent's emotional content (e.g., sad) and states appropriate empathic response to the parent's emotional content. Observe video interactions of good and poor exemplars. Trainee tacts the correct and incorrect interactions. Videos are reviewed with the supervisor and evaluated for the presence of skills. Self-evaluation of skill demonstration in video review. 	 Supervisor records presence or absence of skills. Perform a frequency measure of specific responses. Perform a social validity measure of the parent's perception of these skills in traince. Self-evaluate traince's impression of his or her skills in this area. Use a rating scale to evaluate another's impression of the skill in the traince. 	 Association for Patient Experience (n.d.) Empathetics Neuroscience of Emotions (n.d.) Fuks (2016) Halpern (2001) Massachusetts General Hospital (n.d.) Riess and Kraff-Todd (2014) Segal, Gerdes, Lietz, Wagaman, and Geiger (2017) The Skills You Need (n.d.)
Demonstrates compas- sion	• Provides pauses and opportunities in the conversation for the parent to say how he or she is feeling.	• Jumps to solutions too quickly.	 Role-play activities with supervisor and colleagues. Discuss trainee's personal emotional response to the parent's distress. 	Supervisors records presence or • About Compassion absence of skills. Cultivation Training (2016)	• About Compassion Cultivation Training (2016)

Core Skill	Subskills to Teach	Skills to Monitor	Proposed Activities	Evaluation Measures	Resources
	 Confirms the parent's emotional response in a nonjudgmental way. Provides acknowledgment and makes supportive comments. Discusses how as a team they may address the parent's concerns or emotional pain. Provides reassurance that things will get better. Demonstrates an understanding of what it is like for the parent by offering supportive comments. Offering supportive comments. Offering supportive to alleviate the narent's distress 	 Interrupts the parent's emotional response. Redirects the parent's emotional response. Makes defensive comments. 	 Observe video interactions of good and poor exemplars. Trainee tacts the correct and incorrect interactions. Review and evaluate with supervisor video exemplars of clinical interactions between parents and trainee. 	 Perform a frequency measure of specific responses. Perform a social validity measure of the parent's perception of these skills in trainee. Use a rating scale to evaluate another's impression of the skill in the trainee. 	 Aragon (2016) Armstrong (2010) Kukk (2017) Lown (2016) Lown et al. (2014) Worline and Dutton (2017)
Demonstrates collabora- tion	as when t. and rationale posal. treatment tocceptable. obstacles may rent's ins or irases the parent when trent plan. reiteration of her own opriate. satisfaction. treatment amily's ifestyle.	 Has an authoritarian demeanor. Uses technical jargon. Is quick to offer solutions without asking the parent about concerns about implementation. Acts defensively about the proposed treatment plan. 	 Review case scenarios of complicated cases in which compromise is necessary. Trainee discusses with supervisor the specific directions for compromise. Trainee role-plays responses with supervisor. Observe video interactions of good and poor exemplars. Trainee tacts the opportunities for compromise. Review and evaluate with supervisor video exemplars of clinical interactions between parents and trainee. 	 Supervisor records presence or absence of skills. Perform a frequency measure of specific responses. Perform a social validity measure of the parent's perception of these skills in trainee. Use a rating scale to evaluate another's impression of the skill in the trainee. 	 Lown et al. (2014) Segal and Smith (2018)

Conclusion and Future Recommendations

Empathy and compassion are viewed as essential aspects of clinical care in most other health disciplines and appear to be associated with several positive outcomes, including adherence to treatment (e.g., Schneider, Kaplan, Greenfield, Li, & Wilson, 2004), patient satisfaction (e.g., Chaitoff et al., 2017; Kraft-Todd et al., 2017; Weiss et al., 2017), clinician wellbeing (e.g., McClelland, Gabriel, & DePuccio, 2018; Riess, Kelley, Baily, Dunn, & Phillips, 2012), and health outcomes (e.g., Ambady, Koo, Roshenthal, & Winograd, 2002; Hojat et al., 2011). Behavior analysis has lagged in developing and delivering formal instruction in relationship skills as part of professional training, perhaps due to historical judgment of concepts such as empathy and compassion as too subjective to examine experimentally or teach. However, the importance of the client's perception of treatment, and the relationship between the client and behavior analyst have been acknowledged by some in behavior analysis. Wolf (1978), for example, indicated an important measure of the social validity of our treatments: "If we aspire to social importance, then we must develop systems that allow our consumers to provide us feedback about how our applications relate to their values, to their reinforcers" (p. 213). If, as other disciples are discovering, relationship variables such as compassion and empathy matter to clients, and can impact outcomes, more feedback is needed about behavior analysts' capacity to engage in these responses with clients and caregivers. This feedback will be predicated on, and influenced by, our attention to these variables in our training and research programs and, ultimately, in the clinical care we provide.

The curriculum content outlined in this article could be formulated into a comprehensive training program and experimentally evaluated. Practicum sites, for example, could enhance the training of behavior analysts by developing training protocols with a focus on learning and practicing relational responses that reflect compassionate care. Such protocols might target learning to engage in the nonverbal and vocal behaviors that reflect attentive and empathic listening, such as paraphrasing emotional content or articulating compromise. Measures could be developed that evaluate clinician knowledge and use of these skills in interactions (e.g., roleplay and applications with caregivers). Social validity measures could also be developed that allow caregivers to evaluate the degree to which compassionate care was practiced in the planning of interventions and the treatment of their children and in interactions with family members. Additionally, systematic research could, in the long run, evaluate the extent to which this training improves treatment acceptability (Vazquez et al., 2018) and clinical outcomes for our clients. For example, similar to research conducted in the medical field (e.g., Schneider et al., 2004), it could be determined whether positive ratings of a behavior analyst's relationship skills are correlated with a parent's acceptance and adherence to treatment with his or her child and in turn determine if this impacts overall outcome for the client.

Of course, there is much work to be done to identify the critical components of compassionate care and to develop a viable approach to teaching it as a professional skill. Behavior analysis should begin to articulate the responses that comprise compassionate care, to develop empirically derived training programs to teach these skills, and to assess the collateral benefits on variables such as parent/client satisfaction, adherence to treatment, and client outcomes. As an initial step, we must individually and as a profession interrogate the assumption that concepts such as compassion and empathy are too nebulous or metaphorical to command either our scientific attention or the tools of our discipline. As Friman, Hayes, and Wilson (1998) remind us, "Imprecision of a term, however, is not sufficient justification for such avoidance when the phenomenon to which it refers is so vast and so central to the psychology of human beings" (p. 153). Both the centrality of compassion and empathy toward all lived experiences and the challenge of approaching compassion empirically and experimentally can, and should, compel our attention and inspire our best work. Attention to the salience of the clinical relationship may improve the social validity of our interventions and, in the end, positively impact outcomes for the clients we serve.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflicts of interest.

Ethical Approval All procedures performed were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent The participants in the survey were not identifiable and provided consent by completing the survey.

References

- About Compassion Cultivation Training. (2016, December 7). Retrieved from http://ccare.standford.edu/education/about-compassioncultivation-training-cct/
- Allen, K. D., & Warzak, W. J. (2000). The problem of parental nonadherence in clinical behavior analysis: effective treatment is not enough. *Journal of Applied Behavior Analysis*, 33, 373–391. https://doi.org/10.1901/jaba.2000.33-373
- Ambady, N., Koo, J., Roshenthal, R., & Winograd, C. (2002). Physical therapists' nonverbal communication predicts geriatric patients' health outcomes. *Psychology and Aging*, 17(3), 443–452.
- Aragon, K. (2016). When emotions fill the room: How to use empathic statements to move a conversation forward. Retrieved from http:// www.theschwartzcenter.org/supporting-caregivers/educational-

programs/past-compassion-action-webinars/2016-compassion-in-action-webinars/

- Armstrong, K. (2010). Twelve steps to a compassionate life. New York, NY: Anchor Books.
- Association for Patient Experience. (n.d.). Retrieved from https://www. patient-experience.org/Home.aspx
- Autism Speaks. (2017). *State priorities*. Retrieved from www. autismspeaks.org/state-initiatives
- Baker, C. J., & LeBlanc, L. A. (2011). Acceptability of interventions for aggressive behavior in long-term care settings: comparing ratings and hierarchical selection. *Behavior Therapy*, 42, 30–41. https:// doi.org/10.1016/j.beth.2010.04.005
- Barnes-Holmes, Y., Foody, M., Barnes-Holmes, D., & McHugh, L. (2013). Advances in research on deictic relations and perspectivetaking. In S. Dymond & B. Roche (Eds.), Advances in relational frame theory: Research and application (pp. 127–148). Oakland, CA: Context Press/New Harbinger.
- Behavior Analyst Certification Board. (2014). BCBA/BCaBA task list (4th ed.). Retrieved from https://www.bacb.com/wp-content/ uploads/2017/09/160101-BCBA-BCaBA-task-list-fourth-editionenglish.pdf
- Behavior Analyst Certification Board. (2016). Professional and ethical compliance code for behavior analysts. Retrieved from https:// www.bacb.com/wp-content/uploads/2017/09/170706-compliancecode-english.pdf
- Behavior Analyst Certification Board. (2018). A summary of ethical violations by BACB certificants: 2016–2017. Littleton, CO: Author.
- Behavior Analyst Certification Board. (n.d.). *BACB certificant data*. Retrieved from https://www.bacb.com/BACB-certificant-data
- Carr, J. E., & Nosik, M. R. (2016). Professional credentialing of practicing behavior analysts. *Policy Insights From the Behavioral and Brain Sciences*, 4, 3–8. https://doi.org/10.1177/2372732216685861.
- Center for Excellence in Healthcare Communication. (n.d.). The R.E.D.E. model. Retrieved from http://clevelandclinicexperiencepartners.com/ training-professional-development/rede-to-communicate
- Chaitoff, A., Sun, B., Windover, A., Bokar, D., Featherall, J., Rothberg, M. B., & Misra-Hebert, A. D. (2017). Association between physician empathy, physician characteristics, and standardized measures of patient experiences. *Academic Medicine*, *2*, 1464–1471. https:// doi.org/10.1097/ACM.000000000001671
- Critchfield, T. S., Doepke, K. J., Epting, K. L., Becirevic, A., Reed, D. D., Fienup, D. M., et al. (2017). Normative emotional responses to behavior analysis jargon or how not to use words to win friends and influence people. *Behavior Analysis in Practice*, 10, 97–106. https://doi.org/10.1007/s40617-016-0161-9
- Croen, L. A., Shankute, N., Davignon, M., Massolo, M., & Yoshida, C. (2017). Demographic and clinical characteristics associated with engagement in behavioral health treatment among children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 47(1), 3347–3357. https://doi.org/10.1007/s10803-017-3247-5
- Derksen, F., Bensing, J., & Lagro-Janssen, A. (2013). Effectiveness of empathy in general practice: a systematic review. *British Journal of General Practice*, 63(606), 76–84. https://doi.org/10.3399/ bjgp13X660814
- Di Blasi, Z., Harkness, E., Edzard, E., Georgiou, A., & Kleijnen, J. (2001). Influence of context effects of health outcomes: a systematic review. *The Lancet*, 357, 757–762.
- Empathetics Neuroscience of Emotions. (n.d.). Retrieved from http:// empathetics.com/
- Epstein, R. (2017). Attending: Medicine, mindfulness, and humanity. New York, NY: Scribner.
- Fiske, K. E. (2017). Autism and the family: Understanding and supporting parents and siblings. New York, NY: Norton.
- Fogarty, L. A., Curbow, B. A., Wingard, J. R., McDonnell, K., & Somerfield, M. R. (1999). Can 40 seconds of compassion reduce

patient anxiety? *Journal of Clinical Oncology*, *17*(1), 371–379. https://doi.org/10.1200/JCO.1999.17.1.371

- Fong, E., Catagnus, R., Brodhead, T. M., Quigley, S., & Field, S. (2016). Developing the cultural awareness skills of behavior analysts. *Behavior Analysis in Practice*, 9, 84–94. https://doi.org/10.1007/ s40617-016-0111-6
- Friman, P. C., Hayes, S. C., & Wilson, K. G. (1998). Why behavior analysts should study emotion: the example of anxiety. *Journal of Applied Behavior Analysis*, 31, 137–156. https://doi.org/10.1901/ jaba.1998.31-137
- Fuks, A. (2016, April 20). Active listening: Lost art or learnable skill? Retrieved from http://www.theschwartzcenter.org/past-webinars/ active-listening-lost-art-or-learnable-skill-presented-by-abrahamfuks-md/
- Goetz, J. L., & Simon-Thomas, E. (2017). The landscape of compassion: Definitions and scientific approaches. In E. M. Seppala, E. Simon-Thomas, S. L. Brown, M. C. Worline, C. D. Cameron, & J. R. Doty (Eds.), *The Oxford handbook of compassion science* (pp. 3–17). New York, NY: Oxford University Press.
- Gould, E., Tarbox, J., & Coyne, L. (2017). Evaluating the effects of acceptance and commitment training on the overt behavior of parents of children with autism. *Journal of Contextual Behavioral Science*, 7(1), 81–88. https://doi.org/10.1016/j.jcbs.2017.06.003
- Gould, E., Tarbox, J., O'Hora, D., Noone, S., & Bergstrom, R. (2011). Teaching children with autism a basic component skill of perspective-taking. *Behavioral Interventions*, 26, 50–66. https://doi.org/10. 1002/bin.320
- Halpern, J. (2001). From detached concern to empathy: Humanizing medical practice. New York, NY: Oxford University Press.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). Acceptance and commitment therapy: An experiential approach to behavior change. New York, NY: Guilford.
- Hojat, M., Louis, D., Markham, F., Wender, R., Rabinowitz, C., & Gonnella, J. (2011). Physician's empathy and clinical outcomes for diabetic patients. *Academic Medicine*, *86*, 359–364. https://doi.org/ 10.1097/ACM.0b013e3182086fe1
- Karver, M. S., Handelsman, J. B., Fields, S., & Bickman, L. (2006). Meta-analysis of therapeutic relationship variables in youth and family therapy: the evidence for different relationship variables in the child and adolescent treatment outcome literature. *Clinical Psychology Review, 26*, 50–65. https://doi.org/10.1016/j.cpr.2005. 09.001
- Kelley, J. M., Kraft-Todd, G., Schapira, L., Kossowsky, J., & Riess, H. (2014). The influence of the patient-clinician relationship on healthcare outcomes: a systematic review and meta-analysis of randomized controlled trials. *PLoS One*, 9(4), e94207. https://doi.org/ 10.1371/journal.pone.0094207
- Kirby, J. N., Tellegen, C. L., & Steindl, S. R. (2017). A meta-analysis of compassion-based interventions: current state of knowledge and future directions. *Behavior Therapy*, 48(6), 778–792. https://doi.org/ 10.1016/j.beth.2017.06.003
- Kraft-Todd, G. T., Reinero, D. A., Kelley, J. M., Heberlein, A. S., Baer, L., & Riess, H. (2017). Empathic nonverbal behavior increases ratings of both warmth and competence in a medical context. *PLoS One*, *12*(5), e0177758. https://doi.org/10.1371/journal.pone. 0177758
- Kukk, C. L. (2017). *The compassionate achiever*. New York, NY: HarperCollins.
- LeBlanc, L. A., Coates, A. M., Daneshvar, S., Charlop-Christy, M. H., Morris, C., & Lancaster, B. M. (2003). Using video modeling and reinforcement to teach perspective-taking skills to children with autism. *Journal of Applied Behavior Analysis*, 36, 253–257. https:// doi.org/10.1901/jaba.2003.36-253
- Lown, B. A. (2016). A social neuroscience-informed model for teaching and practicing compassion in health care. *Medical Education*, 50, 332–342. https://doi.org/10.1111/medu.12926

- Lown, B. A., McIntosh, S., McGuinn, K., Aschenbrener, C., DeWitt, B. B., Chou, C., et al. (2014). *Triple C conference framework tables*. Retrieved from http://www.theschwartzcenter.org/media/Triple-C-Conference-Framework-Tables FINAL.pdf
- Lugo, A. M., King, M. L., Lamphere, J. C., & Paige, M. E. (2017). Developing procedures to improve therapist-child rapport in early intervention. *Behavior Analysis in Practice*, 10, 395–401. https:// doi.org/10.1007/s40617-016-0165-5
- Lutz, H., Patterson, B., & Klein, J. (2012). Coping with autism: a journey toward adaptation. *Journal of Pediatric Nursing*, 27, 206–213. https://doi.org/10.1016/j.pedn.2011.03.013
- Massachusetts General Hospital. (n.d.). Empathy and relational science program. Retrieved from http://www.massgeneral.org/psychiatry/ research/empathy_home.aspx
- McClelland, L. E., Gabriel, A. S., & DePuccio, M. J. (2018). Compassion practices, nurse's well-being, and ambulatory patient experience ratings. *Medical Care*, 56, 4–10. https://doi.org/10.1097/MLR. 000000000000834
- Neff, K. D. (2011). Self-compassion, self-esteem, and well-being. Social and Personality Psychology Compass, 5, 1–12. https://doi.org/10. 1111/j.1751-9004.2010.00330.x
- Pastrana, S., Frewing, T., Grow, L., Nosik, M., Turner, M., & Carr, J. (2016). Frequently assigned readings in behavior analysis graduate training programs. *Behavior Analysis in Practice*, 3, 1–7. https://doi. org/10.1007/s40617-016-0137-9
- Post, S. G., Pomeroy, J., Keirns, C. C., Cover, V. I., Dorn, M. L., Boroson, L., et al. (2013). Brief report: Stony Brook guidelines on the ethics of the care of people with autism and their families. *Journal of Autism and Developmental Disorders*, 43(6), 1473–1476. https:// doi.org/10.1007/s10803-012-1680-z
- Riess, H. (2015). The impact of clinical empathy on patients and clinicians: understanding empathy's side effects. *AJOB Neuroscience*, 6(3), 51–53. https://doi.org/10.1080/21507740.2015.1052591
- Riess, H. (2017). The science of empathy. Journal of Patient Experience, 4(2), 74–77. https://doi.org/10.1177/2374373517699267
- Riess, H., Kelley, J. M., Baily, R. W., Dunn, E. J., & Phillips, M. (2012). Empathy training for resident physicians: a randomized controlled trial of neuroscience-informed curriculum. *Journal of General Internal Medicine*, 27(10), 1280–1286. https://doi.org/10.1007/ sll606-012-2063-z
- Riess, H., & Kraft-Todd, G. (2014). E.M.P.A.T.H.Y.: a tool to enhance nonverbal communication between clinicians and their patients. *Academic Medicine*, 89, 1108–1112.
- Sauro, J. (2011). How to interpret survey responses: 5 techniques. Retrieved from https://measuringu.com/interpret-responses/
- Schneider, J., Kaplan, S. H., Greenfield, S., Li, W., & Wilson, I. B. (2004). Better physician-patient relationships are associated with higher reported adherence to antiretroviral therapy in patients with HIV infection. *Journal of General Internal Medicine*, 19, 1096–1103. https://doi.org/10.1111/j.1525-1497.2004.30418.x
- Schwartz Center for Compassionate Healthcare. (2014). Understanding what patients want. Retrieved from http://www.theschwartzcenter. org/partnering-with-patients/understanding-what-patients-want/

- Segal, E. A., Gerdes, K. E., Lietz, C. A., Wagaman, M. A., & Geiger, J. M. (2017). Assessing empathy. New York, NY: Columbia University Press.
- Segal, J., & Smith, M. (2018). Conflict resolution skills. Retrieved from https://www.helpguide.org/articles/relationships-communication/ conflict-resolution-skills.htm
- Sinclair, S., Beamer, K., Hack, T. F., McClement, S., Bouchal, S. R., Chochinov, H., & Hagen, N. A. (2016). Sympathy, empathy, and compassion: a grounded theory study of palliative care patients' understandings, experiences, and preferences. *Palliative Medicine*, 31(5), 437–447. https://doi.org/10.1177/0269216316663499
- Sinclair, S., Norris, J. M., McConnell, S. J., Chochinov, H. M., Hack, T. F., Hagen, N. A., et al. (2016). Compassion: a scoping review of the healthcare literature. *BMC Palliative Care*, 15(6), 6. https://doi.org/10.1186/s12904-016-0080-0
- Strauss, C., Taylor, B. L., Gu, J., Kuyken, W., Baer, R., Jones, F., & Cavanagh, K. (2016). What is compassion and how can we measure it? A review of definitions and measures. *Clinical Psychology Review*, 47, 15–27. https://doi.org/10.1016/j.cpr.2016.05.004
- The Skills You Need. (n.d.). 10 principles of listening. Retrieved from https://www.skillsyouneed.com/ips/listening-principles.html
- Tirsh, D., Schoendorff, B., & Silberstein, L. R. (2014). The ACT practitioner's guide to the science of compassion: Tools for fostering psychological flexibility. Oakland, CA: New Harbinger.
- Tulgan, B. (2015). Bridging the soft skills gap: How to teach the missing basics to today's young talent. Hoboken, NJ: Wiley.
- Vazquez, M., Fryling, M. J., & Hernández, A. (2018). Assessment of parental acceptability and preference for behavioral interventions for feeding problems. *Behavior Modification*, 42, 1–15. https://doi. org/10.11770/0145445517751435
- Vilardaga, R. (2009). A relational frame theory account of empathy. International Journal of Behavioral Consultation and Therapy, 5, 178–184. https://doi.org/10.1037/h0100879
- Weiss, R., Vittinghoff, E., Fang, M. C., Cimino, J. E. W., Chasteen, K. A., Arnold, R. M., et al. (2017). Associations of physician empathy with patient anxiety and ratings of communication in hospital admission encounters. *Journal of Hospital Medicine*, 10, 805–810. https://doi. org/10.12788/jhm.2828
- Windover, A. K., Boissy, A., Rice, T., Gilligan, T., Velez, V., & Merlino, J. (2014). The REDE model of healthcare communication: Optimizing relationship as a therapeutic agent. *Journal of Patient Experience*, 1(1), 8–13. https://doi.org/10.1177/ 237437431400100103
- Winkle, L. J. V., Schwartz, B. D., & Michels, N. (2017, December 11). A model to promote public health by adding evidence-based, empathyenhancing programs to all undergraduate health-care curricula. *Frontiers of Public Health.*, 5. https://doi.org/10.3389/fpubh.2017. 00339
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11, 203–214. https://doi.org/10.1901/ jaba.1978.11-203
- Worline, M. C., & Dutton, J. E. (2017). Awakening compassion at work: the quiet power that elevates people and organizations. Oakland, CA: Berrett-Koehler.