EVALUATING THE EFFECTS OF BEHAVIORAL SKILLS TRAINING WITH BEHAVIOR

ANALYSTS TO INCREASE ESSENTIAL SUPERVISORY SKILLS

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Abstract

Many individuals with autism spectrum disorders (ASD) are currently enrolled in specialized private schools due to challenging behavior or specific learning difficulties. Job responsibilities in these settings can be stressful for staff employed in direct-care positions (i.e., teachers, teaching assistants, paraprofessionals, etc.). Previous research has suggested that high-quality supervisor relationships can moderate staff stress and burnout for direct-care staff in specialized applied behavior analysis (ABA) schools. Literature suggests that improving Board Certified Behavior Analysts' (BCBA) use of corrective feedback, empathetic statements, and reinforcement could contribute to improved supervisory relationships. To date, no research has presented the use of behavioral skills training (BST) to teach BCBAs supervisory skills, and the current study sought to fill this gap in the research. Two BCBAs were taught two essential supervisory skills: corrective feedback and empathetic statements. Both participants mastered each skill quickly following BST. A third skill, reinforcement, met mastery criteria for both participants before BST was implemented. Staff ratings of perceived supervisor support did not support the hypothesis that ratings would improve following BCBA mastery of target skills. Staff ratings were initially high during baseline and remained stable following BCBA training. The results of the present study suggest that behavioral skills training is an effective tool for teaching supervisory skills to BCBAs. Future research is needed in the area of BST with BCBAs and stress and burnout on ASD direct-care staff.

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Supervisory Skills

Introduction

Individuals with autism spectrum disorder (ASD) typically have unique learning

challenges, that require specialized teaching strategies. Sometimes, when these strategies cannot

be accommodated in public school settings, students with ASD are educated in specialized

private schools. One type of treatment used in these schools is applied behavior analysis (ABA).

Until now, research on the stress and strain on these ABA direct-care staff has been limited.

Currently available research has presented some variables that lead to increased burnout for these

specialized staff. Of the available literature, some proposed threats to retention of specialized

ABA staff include commitment to treatment philosophy and teacher efficacy (Jennett, Harris, &

Mesibov, 2003) and perceived supervisory support and perceived therapeutic self-efficacy

(Gibson, Grey, & Hastings, 2009). The current study aims to utilize behavioral skills training to

increase supervisory Board Certified Behavior Analyst's (BCBA) use of corrective feedback,

empathetic statements, and reinforcement in their supervision of direct-care staff. Before

introducing this study, I will first describe working in specialized ABA settings, and examine

what is known about the burnout of ABA therapists and how the supervisory skills for BCBAs

relates to staff burnout. I will then detail the steps of behavioral skills training (BST) and how it

is used in the context of ABA to teach skills, and how it can be extended to teaching supervisory

skills to BCBAs.

Working in Specialized ABA Settings

Individuals with autism spectrum disorder (ASD) sometimes require specialized teaching strategies and behavior management strategies that cannot effectively be implemented in traditional public-school special education settings. A 2019 study by the National Center for Education Statistics (NCES) found that of students with ASD, 7.4% were educated in a separate school for children with disabilities, while the average for all students with disabilities was only 2.9% (Snyder, de Brey, & Dillow, 2019). In 2016, students with ASD made up 8.56% of all students in special education aged 6 to 21 years in New Jersey. In total, 18,511 students with ASD were served in public and non-public special education settings (New Jersey DOE, 2016). Of the 18,511 NJ students with ASD, 4,286 were educated in a setting other than their home school during the 2015-2016 school year.

When students engage in severe challenging behavior or have significant academic deficits, programs with a focus on applied behavior analysis (ABA) can be a good match. According to the Behavior Analyst Certification Board (BACB), applied behavior analysis is "the use of the principles and procedures of behavior analysis to better understand and improve lives" (BACB, 2019). High-quality ABA employs systems of teaching which utilize principles of operant behavior, like reinforcement and the three-term contingency – the understanding that the likelihood of behavior occurring is controlled by its antecedent and consequence - and methods of science, such as description, quantification, and analysis (Cooper, Heron, & Heward, 2007). Within schools that specialize in ABA programming, the precision of teaching, the requirement for technologically sound procedures, and the frequent evaluation of teaching strategies may serve to help the students enrolled who typically exhibit challenges with problem behavior and difficulties with learning.

Lovaas (1987) demonstrated the efficacy of a teaching strategy known as discrete trial training (DTT) for successfully teaching individuals with ASD. Discrete-trial training (DTT) or discrete-trial instruction (DTI) is a commonly used instructional method to teach children with ASD (Carroll, Kodak, & Fisher, 2013). DTI typically consists of five parts: a discriminative stimulus (i.e., an instruction), a controlling prompt, the child's response, a consequence, and an intertrial interval (Koegel, Russo, & Rincover, 1977; Smith, 2001). Lovaas (1987) reported that 47% of the children with ASD in the intensive-treatment group who received 40 hours of one-to-one instruction each week achieved higher levels of functioning, compared to only 2% in the control group, who received 10 hours or less of one-to-one instruction each week. The comparison has since been replicated with similar results (Cohen, Amerine-Dickins, & Smith, 2006; Howard, Sparkman, Cohen, Green, & Sanislaw, 2005). To be successful, ABA programs require intense, consistent, and nearly constant feedback and correction of the child's behavior (Ryan, Hughes, Katsiyannis, McDaniel, & Sprinkle, 2011). Despite the high degree of difficulty to implement, ABA has garnered a large body of research that supports its use for both academic and behavioral interventions for children with ASD (Simpson, 2004).

Frequently, students with ASD engage in behaviors such as self-injury, aggression, disruption or destruction of materials, and noncompliance (Horner, Carr, Strain, Todd, & Reed, 2002). For many ABA therapists and teachers, especially in non-public school settings, managing a client or student's challenging behavior is a daily occurrence. Although managing challenging behavior is frequently a common task for these instructors, emotional stress related to all aspects of controlling the behavior can take a toll on instructors. Typically, staff are required to collect data on the antecedent and consequence of challenging behavior (what happened before and after) and data related to the behavior itself (how many aggressions, what

kind?). In addition to the data staff are required to collect, they are also expected to manage the behavior according to the systems set forth in a sometimes complicated behavior plan (Gresham, Gansle, & Noell, 1993), grapple with the stress following an episode of highly dangerous or destructive behavior, and cope with physical injury which may have occurred during the episode.

In addition to addressing various topographies of challenging behaviors, staff are tasked with running skill acquisition programs that are individualized for each student. Although no literature is available on the day-to-day requirements of direct-care staff, a book by Handleman and Harris (2001) describes eleven pre-school ABA programs, including the types of curriculum used, the approaches to teaching implemented, and the methods for assessing and managing challenging behavior. Each of these descriptions detailed the immense amount of support provided to students educated in their programs. These supports can do wonders for individuals on the spectrum who require individualized instruction to learn and detailed behavior intervention plans to teach alternative behaviors to replace maladaptive and dangerous behaviors. Each aspect of these individualized education plans is completed by direct-care staff each day.

Overall, direct-care staff are relied on to ensure accurate and appropriate care and education of clients with ASD which can require staff to manage challenging behavior, accurately run skill acquisition programming, and maintain a strong relationship with clients. These responsibilities combine to create a stressful work environment. One measure of the impact of stress on individuals is burnout. Job burnout, a state of physical, emotional or mental exhaustion combined with doubts about one's competence and the value of one's work (Informed Health, 2017), is an issue faced by many individuals who work in health and human services fields including nursing, social work, and education.

Burnout, although complex, has been pertinent to the literature surrounding helping professionals for more than 40 years. Burnout was first described in two scientific articles in 1974 (Freudenberger, 1974; Ginsburg, 1974 in Heinemann & Heinemann, 2017). Burnout is conceptualized using three constructs: emotional exhaustion, depersonalization, and personal accomplishment (Maslach, Schaufeli, & Leiter, 2001). Emotional exhaustion is an experience that prompts a person to distance themselves both emotionally and cognitively from their work (Maslach et al., 2001). Typically, the emotional demands of a person's job can lead him or her to become emotionally exhausted when they are not given the appropriate tools to handle the sometimes-overwhelming experience of working in human service. Depersonalization is one's attempt to put distance between themselves and their clients. As Maslach and colleagues (2001) described, the demands of a person's job are more manageable when they view the client as impersonal objects rather than viewing them as unique and engaging people. Sometimes referred to as inefficacy, a lack of personal accomplishment is the third component of burnout which can be understood as a function of the other two components of burnout (Maslach et al., 2001).

When a person is working at a job with consistently overwhelming demands that contribute to exhaustion or depersonalization, their efficacy is likely to decline. Maslach et al. (2001) proposed that a lack of efficacy seems to come from a lack of relevant resources from the larger organization (e.g., training, support, money, etc.), while exhaustion and depersonalization develop because of an overwhelming work load combined with social conflict – typically lack of support from coworkers and administration. The general research on burnout suggests that those working directly with individuals with ASD could be at a high risk of developing burnout. However, there is a dearth of research focused on factors unique to ABA direct-care staff working with individuals with ASD.

Burnout of ABA Staff

Currently, literature regarding burnout of ABA staff and therapists is lacking. No specific statistics on the level of burnout for these professionals are available. However, two studies present findings on the factors contributing to burnout of ABA therapists and staff in specialized educational settings for children with ASD (Gibson et al., 2009; Jennett et al., 2003). Jennett et al. (2003) evaluated how therapist commitment to teaching philosophy related to therapist burnout and teaching efficacy when comparing therapists utilizing a Treatment and Education of Autistic and Communication related handicapped Children (TEACCH) model of treatment versus an ABA model. Gibson et al. (2009) measured how perceived supervisor support and therapeutic self-efficacy related to therapist burnout in an ABA school in Ireland.

Commitment to philosophy and teaching efficacy. Jennett et al. (2003) evaluated the correlations between therapists commitment to their educational orientation, professional self-efficacy, and the level of burnout they experienced. The study utilized two groups of lead classroom teachers from an ABA program and a TEACCH program. TEACCH is a program which aims "to use general characteristics of learning in autism plus highly individualized approaches to help individuals with autism both learn skills and use visual, organizational, and structural adaptations to their environment to function as independently as effectively as possible in society" (Schopler, 1994 in Welterlin, Turner-Brown, Harris, Mesibov, & Delmolino, 2012, p. 1828). Participants completed four measures: the Autism Treatment Philosophy Questionnaire, the Teacher Efficacy Scale, the Maslach Burnout Inventory (MBI), and a demographics questionnaire. Results of each measure were compared between groups and two main findings were presented: the relationship between commitment and teaching efficacy and the relationship between commitment and burnout.

The results of the study suggest that commitment to teaching philosophy was significantly positively correlated with personal teaching efficacy. That is, the more committed teachers were to the philosophy of a teaching style, the greater the sense they were having an impact on students (Jennett et al., 2003). Additionally, the authors hypothesized that the higher a teacher's commitment to teaching philosophy, the less burnout they would experience. The results found this to be strongly supported within the personal accomplishment dimension of burnout on the MBI. Commitment to teaching orientation was significantly positively correlated for the TEACCH group and was near significant for the ABA group. This would suggest that the more teachers agree with the philosophy of the program they are working in, the more satisfied they would feel in their work, which could protect them from burnout (Jennett et al., 2003).

A final interesting takeaway from the study is that degree of commitment was not significantly correlated with depersonalization for either group. Depersonalization is a stage of "psychological withdrawal from relationships and the development of a negative, cynical, and callous attitude" (Hartney, 2008, p. 11). Both groups reported low levels of depersonalization, which suggest that the teachers in the study did not withdraw from their student or develop indifferent attitudes about them (Jennett et al., 2003). This could suggest that the cause of burnout for these individuals is unrelated to their interactions with clients and burnout could be exacerbated by other factors related to their job including relationships with administration and the organization in general.

Perceived supervisor support and therapeutic self-efficacy. Gibson et al. (2009) evaluated the predictive strength of supervisor support on burnout and therapeutic self-efficacy of ABA therapists working in specialized schools. The goal of the study was to begin understanding the work perceptions of ABA therapists and their work-related well-being. The

authors hypothesized that supervisor support would not mediate the impact of work demands of

therapist burnout, instead they believed that supervisor support would moderate this relationship

suggesting that therapists reporting high demands and low support would have the highest

negative burnout scores.

    The study included 81 therapists working in schools that used ABA methodology to teach

children with ASD. Five measures were administered to gain an understanding of the teacher's

level of burnout. These measures included the MBI, the Perceived Therapeutic Self-Efficacy

Scale (PTSE), four items from the Work Demands sub-scale of the School Organisational Health

Questionnaire, the Perceived Supervisor Support scale, and the Autism Treatment Philosophy

Questionnaire. The authors utilized a variety of statistical analyses to understand the data

gathered from the five measures. Through these analyses, the authors determined that the role of

perceived supervisor support is essential in understanding burnout in ABA therapists working in

specialized schools. The authors explained that high levels of perceived supervisor support were

correlated with reduced emotional exhaustion and depersonalization and increased personal

accomplishment and perceived therapeutic self-efficacy. Perceived supervisor support can be

thought of not only as the amount of time the supervisor spends observing or helping the staff

but also considers the quality of the supervisor's help and feedback for the staff member. An

additional finding is the utility of supervisor support to protect therapists from reduced personal

accomplishment when faced with high levels of perceived work demands. This suggests that a

supervisor can help their staff to avoid factors that lead to burnout (stress and reduced

accomplishment) by providing high-quality supervision and support.

    Finally, the authors reflected on the impact of the characteristics of effective supervision.

The use of the Perceived Supervisor Support scale within the study focused on how the ABA

therapists thought and felt about their supervisor. The authors suggested that supervisors who have an encouraging style – marked by frequent use of reinforcement principles with their supervisees – and demonstrate empathy with their therapists' experiences in their direct intervention role, may have the best outcome. However, Gibson and colleagues (2009) fail to provide a definition of empathy. Their final recommendation is that supervisors should have experience with both direct intervention work and have the skills to carefully listen to their therapists' perspectives about what is most challenging during their work. The authors suggest that future researchers measure perceived supervisor support when supervisors are implementing effective feedback strategies and using empathy.

Despite recommendations that supervisors utilize reinforcement and empathy when interacting with employees, employees supervising ABA direct care staff, typically BCBAs, may receive minimal training regarding how to implement effective feedback or how to use empathy to build a therapeutic relationship (LeBlanc, Taylor, & Marchese, 2019). For example, no behavior analytic literature focuses explicitly on how to teach effective supervisory skills to BCBAs (Turner, Fisher, & Luiselli, 2016). One article presents suggestions for how behavior analysts should approach supervisees and begin developing and maintaining a positive relationship with supervisees (Sellers, Valentino, & LeBlanc, 2016) by providing frequent specific praise and feedback, giving corrective feedback in two parts (what was done incorrectly and how to do it correctly next time; Reid, 2012), and providing an empathetic statement when giving feedback. Although these recommendations are useful and reflect the preferences of the BACB (2018), behavior analysts are not given proper training in how to effectively utilize empathy with families (LeBlanc et al., 2019), which could suggest a lack of understanding of how to do so with staff.

Essential Supervisory Skills

The findings from Gibson and colleagues (2009) suggests that teacher burnout in special education may be reduced by the provision of greater supervisor support. Two approaches that supervisors can take to provide support in the context of ABA programs are to utilize performance feedback and emotional support with staff. Performance feedback is distinct from emotional support as performance feedback serves to provide a practitioner of how well they are doing (Rummler & Brache, 1995 in Alvero, Rost, & Austin, 2008) or to provide information about a performance that allows an individual to adjust his or her performance (Daniels, 1994 in Alvero et al., 2008). When implemented most effectively, performance feedback is two-pronged, featuring both corrective feedback and reinforcement for tasks completed well (Alvero et al., 2008). As an example, a BCBA may provide performance feedback to their staff by stating, "It was great that you were prepared for the session with all of your materials laid out (reinforcement) and I think you could improve by using a gesture prompt instead of a physical prompt (corrective feedback)." In contrast, emotional support provides supervises with a feeling of being understood and appreciated for their efforts.

Performance feedback. Alvero, Bucklin, and Austin (2001) reviewed articles published on performance feedback as an intervention in applied studies in four peer-reviewed journals. The authors based their research on a study by Balcazar, Hopkins, and Suarez (1985) in which the authors reviewed performance feedback articles in the *Academy of Management Journal* (*AMJ*), the *Journal of Applied Behavior Analysis* (*JABA*), the *Journal of Applied Psychology* (*JAP*), and the *Journal of Organizational Behavior Management* (*JOBM*). Using their search criteria, the authors found 43 articles with a total of 68 applications of feedback. The authors evaluated six aspects of the performance feedback interventions: source, medium, frequency,

participants, privacy, and content. Each element was evaluated by measuring the consistency

effects (amount of uniformly produced desired mean increases or decreases of performance when

compared to baseline) for those receiving the feedback. Overall the highest consistency effects

were seen for feedback provided by supervisors/managers or researchers (source of feedback),

using a combination of graphs with either written or verbal feedback (medium of feedback),

either daily, monthly, or a combination of daily and weekly (frequency of feedback), to a group

of participants (participant of feedback), in a combination of private and public sessions (privacy

of feedback), and evaluating group performance with a standard of group performance,

individual performance with individual performance or previous performance (baseline), or

group performance with its previous performance (Alvero et al., 2001).

  The results of the study suggest the most effective ways to provide performance feedback

in an organization. Some of the important aspects of feedback that the authors identified include

making feedback individualized, addressing controllable areas of change, graphing feedback,

making feedback easy to understand, and combining corrective feedback with reinforcement.

Reinforcement is a principle of behavior in which something (e.g., praise, tangible items) is

delivered contingent upon a specific behavior and that specific behavior is observed to increase

over time (Cooper et al., 2007). The BACB Supervision Curriculum (BACB, 2012) suggests that

supervisors utilize reinforcement while providing performance feedback to their staff or

supervisees. For many individuals, the presentation of social praise following a behavior can

serve as a reinforcer.

  A 1983 article compared the use of verbal feedback and verbal feedback plus praise on

the training behaviors of staff in an adult residential facility in a multiple baseline design. The

authors found that both were effectively able to improve staff training skills with greater

improvements found in the feedback plus praise condition (Realon, Lewallen, & Wheeler, 1983).

Conceptually, because the combination of feedback and praise increased the staff members'

training behaviors when implemented contingently upon completion of the desired behaviors,

feedback and praise can be considered a positive reinforcer. Overall, the use of reinforcement is

best practice for those in a supervisory role (BACB, 2012).

  Emotional support. In addition to performance feedback, emotional support is essential

to establishing and maintaining a strong supervisory relationship (Jayaratne & Chess, 1984).

Emotional support seeks to provide empathy, caring, trust, and concern (Jayaratne & Chess,

1984). To utilize emotional support, a supervisor could provide an empathetic statement when

they observe their staff feeling frustrated with a student's performance. Using the example from

above, the same supervisor might also say, "You did a really nice job following the program

(reinforcement) and I noticed you seemed frustrated when the student resisted your physical

prompt. I understand that it can be hard when you are following what the program says and the

student doesn't react how we expect (empathic statement). Next time let's try a gesture prompt

and we can troubleshoot from there (corrective feedback)." The BACB Supervisor Training

Curriculum (BACB, 2018) recommends that BCBA supervisors provide an empathy statement

when providing feedback to their supervisees.

  Empathy is a complex construct, which is difficult to define as the utility of empathy can

vary depending on the relationship it is used within. Historically, research regarding empathy

and empathic responding has come from psychotherapy and counseling literature. Rogers (1980)

defined empathy as, "the therapist's sensitive ability and willingness to understand the client's

thoughts, feelings and struggles from the client's point of view." Elliott, Bohart, Watson, and

Greeneberg (2011) identified three of the subtypes of empathy utilized in a therapeutic

relationship: empathic rapport, communicative attunement, and person empathy. Each form of empathy serves a unique purpose and allows the therapist to utilize empathy to make their client feel supported, rather than just provide advice or commentary on the client's experience.

Within psychotherapy, empathic rapport is the establishment of a compassionate attitude towards the client's experience; communicative attunement is the active, ongoing effort to stay attuned on a moment-to-moment basis with the client's communications; and person empathy is the effort to understand the kinds of experiences the client has had throughout their life and currently in order to inform the background of the client's current experience (Elliot et al., 2011). When conceptualizing the potential role of empathy for the behavior analyst, empathic rapport serves the same role: for the behavior analyst to provide a compassionate attitude toward their direct care staff. However, communicative attunement and person empathy serve slightly different functions.

One might understand the interaction of communicative attunement and person empathy as a two-part system in which the BCBAs consistently observe the direct care staff's effort put forth when managing a difficult situation with a student and to reflect on the emotional reaction the staff could be feeling during the interaction. The distinction between observing the direct care staff's effort rather than just measuring their success while implementing a procedure allows for the BCBA to respond with emotional support in addition to technical advice. This process can be supported by the BCBA reflecting on their own training or experience when they were in the role of direct-care staff, which echoes Gibson et al. (2009) suggestion that behavior analysts have experience implementing behavior programming themselves before becoming a supervisor.

Empathy has historically been measured within a therapeutic context using observer-ratings, client ratings, therapist rating, and empathic accuracy, which measures if the therapist's

empathic response is congruent with the client's experience (Elliott et al., 2011). Observer-rated

empathy is typically measured by having an outside observer listen to a therapy session and rate

the therapist's responses to the client using a rating scale. Truax and Carkhuff (1967) were some

of the first researchers to utilize this technique to measure empathy within psychotherapy (Elliott

et al., 2011).

In 1982, Elliott et al. developed an observer empathy rating scale for use within

psychotherapy sessions. The participants of the study included client/counselor pairs. The clients

were asked to discuss a personal concern for 30 minutes and the counselors were told to do

whatever they thought would be helpful. Raters used the Response Empathy Rating Scale to

assess the counselor's response empathy after listening to short, randomly selected clips of the

30-minute session. Raters responded to nine questions regarding the session, which included:

1. Does the counselor try to perceive the world as it appears to the client?

2. Does the counselor make inferences to tell the client something the client hasn't said

    yet, in order to add to the client's frame of reference or to bring out implications?

3. To the extent that inference or clarification is present, how likely to be true is what

    the counselor said, given what the client had said so far?

4. Does the counselor refer to what the client is experiencing at the current moment?

5. Does the counselor refer to what is most important to the client? Does the counselor's

    response relate to the client's basic complaint or problem?

6. Does the counselor use rich, vivid, metaphorical language in a way consistent with

    the client's discourse?

7. Is the counselor's voice expressive or empathic and appropriate to what the client is

    expressing?

8. Does the counselor communicate a sense that the counselor and client are working together in a process of exploration?

9. Does the response facilitate the client's exploring further or bringing up new material, or does it block or distract the client? (p. 381-382)

Raters used a five-point rating scale to measure the amount that the counselor engaged in the described behavior. Raters included trained undergraduate students, and each received regular feedback on their reliability during the rating process. Following the initial evaluation, researchers determined that some modifications should be made to the measure including dropping the accuracy and voice components, splitting manner into two components (collaboration and exploration), and adding or modifying components to parallel the literature (reference client feelings, expressiveness, and verbal allowing). Currently, observer rated empathy measures focus heavily on psychotherapy, but have not extended into the field of ABA.

As a start, a 2018 paper by Taylor, LeBlanc, and Nosik presented the findings of a survey for parents about their experience with BCBAs who treat their children with ASD. The study evaluated three areas of importance which affect the therapeutic relationship between parents and BCBAs: listening and collaboration, empathy and compassion, and problems within the relationship. The survey identified some areas in which behavior analysts are already successfully performing well on according to parents, such as "When first meeting me and my child, the behavior analyst listened to my concerns about my child" and "The behavior analysts cares about my child." However, the authors noted areas in which the survey suggested that behavior analysts could improve, including items related to core relationship skills. On the survey items related to compassion and empathy, respondents rated BCBAs high on items about caring about and supporting the child. However, respondents had much lower overall responses

to items related to overall support of the family, acknowledging mistakes or treatment failures, and being patient and reassuring.

Based on these results and the BACB's ethics code and training requirements which emphasizes training in relationship skills, Taylor et al. (2018) proposed a curriculum for training programs to utilize when teaching compassionate behavior analytic care. The authors present a behavior analytic perspective of empathy, which utilized relational-frame theory (RFT; Barnes-Holmes, Foody, Barnes-Holmes, & McHugh, 2013) to explain how a behaviorally oriented practitioner can implement empathy in their therapeutic relationships. The authors explained that a person can use perspective taking to understand a difficult situation from another person's point of view by thinking of a time they were in a similar situation and reflecting on how they felt at the time.

In the same way Taylor et al. (2018) recommend utilizing RFT to understand the experience of parents and families, behavior analysts could use RFT to reflect on their experience as direct-care staff to gain a better understanding of the experience of their supervisees. This is an important aspect of using empathy with staff members because typically BCBA supervisors have experience as a direct-care staff member and can use perspective taking to understand how a staff member might feel in a difficult situation by reflecting on their own experience. The task analysis (TA) presented by Taylor et al. (2018) features eleven steps that a behavior analyst can use to demonstrate empathy with parents, and many of these steps can easily be generalized to providing empathy to staff members. Specifically, six of the eleven steps could be clinically useful when providing supervision to direct-care staff. These include making eye contact while providing feedback, using a reassuring tone of voice, identifying and responding appropriately to nonverbal cues (e.g., lack of eye contact, sad facial expression)

and/or paraphrasing staff's emotional statements, acknowledging and naming the staff's feeling

(e.g., "You seem upset"), and verifying the emotional response as reasonable (e.g., "I totally

understand why you are annoyed"). Just as BCBAs use task analyses to teach clients new skills,

the behaviors associated with empathy can be broken down into smaller steps and taught to

BCBAs for use in their supervision of staff.

LeBlanc et al. (2019) presented a study of the training experiences of Board Certified

Behavior Analysts (BCaBAs, BCBAs, and BCBA-Ds) regarding compassionate care and

therapeutic relationships with caregivers. A total of 221 surveys from behavior analysts were

collected through online survey distribution. When asked if they had training experiences during

their behavior analytic coursework in the topics of compassion, empathy, and therapeutic

relationships with families, respondents indicated 28% of respondents had lectures on the topic

and 24% were assigned readings on the topic. During supervised practical experience,

respondents indicated that 18% of sites delivered didactic training on the topic and 50% of

respondents received mentored practical experience about these topics. Of respondents, 45%

indicated that they encountered training in these topics for another degree, certification, license,

or discipline. Overall, this suggests a lack of formal training within behavior analysis programs

on how to act with compassion and empathy and how to build and maintain a therapeutic

relationship with families.

Interestingly, when asked about their own pursuit of training and information in this area,

respondents indicated that 40% received training from employers, 44% sought this training from

someone other than their employers separate from certification training, 59% independently

pursued professional development activities (not workshops) in this area (e.g., reading articles or

books), 23% pursued mentoring in this area, and 58% of respondents in a supervisory or

leadership role have prepared trainings or mentored other on this topic. Respondents were asked to rank the importance of these topics of skills when working with families of individuals with ASD. When asked if they have ever been in a situation where they felt unprepared or not trained to respond to the emotional responses of a family member of a client, 9% responded "Yes, often," 74% responded "Sometimes," and 18% responded "Never." When asked if they were ever concerned that their colleagues lack skills in these areas, 47% responded "Yes, often," 48% responded "Sometimes," and 5% responded "Never."

These numbers could suggest that behavior analysts feel unprepared for working with families and are unsure of how to be compassionate or empathetic when it is most necessary or most difficult. However, a more compelling support for this argument comes from an open-ended response shared in the article, "I have felt unprepared when interacting with hostile families, or families who indicate dissatisfaction with services, or who respond with anger towards other situations in life (e.g., marital problems, sibling issues)." This response paints a picture of a behavior analyst, who despite presumed competence in the technology of behavior analysis, is unable to cope or manage the other demands of this field – the systems at work around clients.

In general, the results of this survey suggest that behavior analysts have not received training, feel unprepared to utilize, and believe there is a need for more emphasis on compassion, empathy, and therapeutic relationships with families. According to the authors, these results also indicate that behavior analysts value these skills and view them as essential but received little training in these skills. The authors encouraged the development of training programs in these topics for behavior analysts and suggested the empirical validation of a training curriculum, such as the one developed by Taylor et al. (2018) as a future direction for other researchers.

Of the small amount of current literature focused on behavior analysts developing strong therapeutic relationships and utilizing compassionate care, all the articles have a focus on developing relationships with families and parents. Although this is a strong step in the right direction for improving relational abilities of BCBAs, this highlights the lack of research on behavior analysts using compassion and building therapeutic relationships with the staff they supervise. In the same vein that Taylor et al. (2018) suggest developing a curriculum for teaching BCBAs to improve relationships with families, this concept should be expanded for improving relationships with direct-care staff.

Addressing areas of both performance feedback and emotional support can be addressed by teaching behavior analysts' specific skills that they can use with their trainees. Three clearly defined skills that can be taught to behavior analysts that may increase perceived supervisor support are corrective feedback, reinforcement, and the use of empathetic statements. A topic such as this will lend itself well to the application of behavioral skills training, a commonly used tool for effectively teaching new techniques and strategies to individuals within applied behavior analysis literature.

Behavioral Skills Training

In the context of ABA, new skills are often taught to individuals—be they individuals with ASD, parents, or other caregivers—using behavioral skills training. This technique has been effectively shown to train individuals with ASD, parents, siblings, and other caregivers to utilize new skills within the field of ASD treatment (Turner, Fisher, & Luiselli, 2016). Additionally, it has been shown to be an effective strategy to teach skills completely unrelated to ASD treatment such as gun safety to young children (Miltenberger et al., 2004). This teaching method may

prove to be equally effective in teaching supervisory skills, such as reinforcement and empathy,

to behavior analysts.

Within the field of behavior analysis, behavioral skills training (BST) has been supported

as the most effective method of training individuals to implement new skills. In 2012, Parsons,

Rollyson, and Reid outlined the six steps of BST. The first step is to describe the target skill. To

do this, the trainer will provide a rationale for the importance of the skill and a description of the

behaviors required to perform the skill (Willner et al., 1977). Additionally, the trainer must

behaviorally define the target skill, which could be completed by providing a performance

checklist of necessary actions to complete the skill (Lattimore, Stephens, Favell, & Risley,

1984). The second step is to provide a succinct written description of the target skill in which the

trainer will provide a brief written summary of exactly how to respond in different situations

(Macurik, O'Kane, Malanga, & Reid, 2008). Third, the trainer will demonstrate the target skill.

To do this, the trainer will model the target skill through a role-play process (Adams, Tallon, &

Rimell, 1980). This is typically completed by two trainers, but a trainee can assist if needed.

Another alternative is to use video models as the demonstration component for teaching trainees'

specific skills (Catania, Almeida, Liu-Constant, & Reed, 2009; Sarokoff & Sturmey, 2004). The

fourth step is to have the trainee practice the target skill. During the fourth step, trainees will

rehearse the skill in a role-play with either another trainee or the trainer. Fifth, the trainer will

provide performance feedback during practice. Trainers will provide feedback to the trainees as

they practice the target skill. Both supportive and corrective feedback should be delivered.

Finally, the sixth step is to repeat steps four and five to mastery. The fourth and fifth skills

should be repeated until the trainee meets pre-established mastery criteria. Mastery criterion

could be set at 100% success at performing all the target steps (Miles & Wilder, 2009) or with a

lower overall percentage of success but with 100% success on the most crucial steps (Neef,

Trachtenberg, Loeb, & Sterner, 1991).

Each step of BST is essential to the effectiveness of the training method (Parsons et al.,

2012). Rehearsal (Step 4) is one of the most frequently omitted steps in BST (Reid, 2012,

Chapter 4). Despite its frequent omission, rehearsal of the target skill is crucial aspect of what

makes BST so effective (Nigro-Bruzzi & Sturmey, 2010; Rosales, Stone, & Rehfeldt, 2009). It is

hypothesized that rehearsal is omitted so frequently because it requires a large investment of time

for both the trainer and trainee (Parsons et al., 2012). When implemented using all six steps, BST

is a powerful tool for teaching new skills.

Behavior analytic literature has shown the utility of BST time and time again. According

to Turner et al. (2016), behavioral skills training has been demonstrated as an effective method

of training multiple groups, including typically developing children (Himle, Miltenberger,

Flessner, & Gatheridge, 2004), children with autism (Gunby & Rapp, 2014), teaching staff (Dart,

Radley, Furlow, & Murphy, 2017; Lavie & Sturmey, 2002; Sarokoff & Sturmey, 2004), and

parents (Himle & Wright, 2014; Seiverling, Williams, Sturmey, & Hart, 2012; Shayne &

Miltenberger, 2013). As an example, Hogan and colleagues (2015) utilized BST to teach

instructional staff to accurately implement behavior intervention strategies.

A 2015 study by Hogan, Knez, and Kahng focused on using BST to improve

implementation of behavior intervention plans (BIP) by instructional staff at a nonpublic day

school for children with ASD and related disabilities. Researchers taught four instructional staff

to effectively implement three components of their student's BIP. Staff 1 and 2 were taught to

implement differential reinforcement of an alternative behavior, noncontingent reinforcement,

and extinction procedures. Staff 3 and 4 were taught to signal availability or unavailability of a

break, differential reinforcement of an alternative behavior, and extinction procedures. For all

participants, percent of correct implementation was low during baseline. Researchers then

provided instructions for how to run each component of the BIP. Percent of correct

implementation increased but did not reach 100% accuracy on all skills. The researchers then

implemented modeling, rehearsal, and feedback. Following modeling, rehearsal, and feedback,

all participants mastered all target skills. These results are one of many examples of BST

effectively teaching non-BCBAs to correctly implement behavior analytic strategies and

techniques.

Despite the wealth of information regarding BST's success with non-behavior analysts,

the use of BST to train behavior analysts has not been demonstrated in the current literature. To

date, behavioral skills training has not been used in the literature to provide skills training to

behavior analysts in any capacity (Turner et al., 2016). The gaps in the literature present an area

of knowledge which could be built upon to help increase the understanding of the utility of BST

and improve the supervisory experiences of behavior analytic staff, which could help to ease

their stress and burnout (Gibbons et al., 2009).

Rationale for Present Study

Given the immense stress experienced by ABA direct care staff, exploring the most

effective way to support these staff is important. Of the available research, perceived supervisor

support is one of the most important protective factors for direct care staff working with children

with ASD who engage in challenging behaviors. Despite this correlation, to date, no studies have

evaluated a method for improving the supervisory relationship within school-based behavior

analytic services. If perceived supervisor support can be improved using BST with behavior

analysts, this has important implications for those training and supervising these individuals. The

potential benefits of teaching behavior analysts to utilize corrective feedback, empathetic

statements, and reinforcement more effectively may help to alleviate staff stress in these settings

and improve staff perceptions of supervisor support.

Hypotheses

The aim of the present study is to utilize behavioral skills training to increase BCBA use

of corrective feedback, reinforcement, and empathetic statements during performance feedback

sessions with their staff. This study examined the behavior analyst's use of the target skills

before and after behavior skills training. It was hypothesized that behavioral skills training would

increase BCBA's use of the targeted skills—effective corrective feedback, reinforcement, and

use of empathetic statements—from baseline levels. Additionally, this study measured the

behavior analyst's staff's perceived supervisor support pre- and post-behavioral skills training.

Those who work directly with students engaging in challenging behavior (teachers,

paraprofessionals, teaching assistants, etc.) report that a lack of supervisor support is a major

cause of burnout and stress (Gibson et al., 2009). Though burnout was not measured, it was

hypothesized that staff would report lower levels of perceived supervisor support before

behavioral skills training was implemented with their supervisor and an increase would be seen

in perceived support post-BST.

Methods

Participants

BCBAs were recruited through a university-based specialized day school for children

with ASD by emailing the recruitment flyer to BCBAs on staff who were in a supervisory

position. Inclusion criteria for participation were that the BCBA was employed as a supervisor of

direct-care staff who worked with students with ASD. Following recruitment of BCBAs, the

direct-care staff they supervised were also recruited for participation. Staff were included if they

had been employed as direct-care staff at the center for at least 3 months.

Two BCBAs, Jessica and Joe, were recruited and provided consent to participate in the

study. Following recruitment of BCBAs, direct-care staff working under Joe and Jessica were

recruited. In total, 5 staff consented to participate: Kristin, Sarah, Reagan, Louis, and Don.

Before data collection began, Don was transferred to a new position in the program, in which he

was not supervised by Jessica or Joe and he was removed from the study.

Materials

Demographic questionnaire. A demographic questionnaire was administered to gain

information about participants' age, ethnicity, gender, number of years in the current position,

and level of education or training.

Dependent variables. A task analysis of each target behavior was created. *Corrective*

feedback was defined as any statement in which the BCBA commented on something the staff

member did incorrectly during the observed session and provided information about how to

complete the step correctly. Corrective feedback comprised four steps: identify and state error(s),

provide information on how to fix the error next time, ask the staff member if they have any

questions, and answer any questions. *Reinforcement* was defined as implementing positive

reinforcement procedures in which the BCBA provides behavior specific or social praise to the

staff member. Reinforcement comprised two steps: identify and state all steps accurately

completed and provide behavior-specific praise for each step. *Empathic responding* was defined

as any response in which the BCBA vocally acknowledged the staff's emotional response and

verified the response as reasonable (Taylor et al., 2018). Empathetic statements comprised five

steps: make eye contact while giving feedback, use a reassuring tone of voice, identify and

respond appropriately to nonverbal cues (e.g., lack of eye contact/sad facial expression) and/or

paraphrase staff's emotional statements, acknowledge and name the staff's feeling (e.g., "You

seem frustrated"), and verify the emotional response as reasonable. The task analyses were

derived from the Alvero et al. (2001) performance feedback suggestions and the Taylor et al.

(2018) staff training on using empathy and compassion. All target behaviors were measured

using task analysis and reported as percent correct for each skill.

Interobserver agreement (IOA) for each dependent variable was collected by a research

coordinator using the same task analysis for 30% of treatment integrity sessions for each

behavior analyst. Percent agreement was calculated by dividing the number of TA steps with

agreement by the total number of steps and multiplying by 100. Average IOA was 100% for

corrective feedback, 100% for reinforcement, and 64% (range, 40% to 100%) for empathetic

statements. Individual IOA for each BCBA's empathetic statements sessions was 73% (range,

40% to 100%) for Jessica and 57.5% (range, 40 to 100%) for Joe.

Perceived Supervisor Support scale. Perceived supervisor support was an additional

dependent variable measured using the Perceived Supervisor Support scale (PSS; Eisenberger,

Stinglhamber, Vandenberghe, Sucharski & Rhoades, 2002). The PSS (Eisenberger et al., 2002) is

a commonly used tool which measures the respondent's perceived level of support from their

supervisor. The PSS comprises eight items each designed to measure the extent to which an

employee feels supported by their direct supervisor. Direct-care staff were asked to rate each

item on a 7-point scale from "strongly disagree" to "strongly agree." The PSS has been reported

to have high internal consistency and Cronbach's alpha coefficient of .81 (Eisenberger et al.,

2002; Gibson, Grey, & Hastings, 2009).

Design

Behavioral skills training was implemented within a multiple-baseline design across skills (corrective feedback, empathetic statements, reinforcement) for each participating behavior analyst. Visual inspection was used to evaluate the effects of the intervention. Surveys were administered to the direct-care staff three times: once during supervisor baseline and then again after the supervisors mastered corrective feedback and empathetic statements.

Data from the multiple-baseline design with the behavior analyst was graphed and analyzed using visual inspection as data was collected to make training decisions. The PSS was administered to staff throughout the multiple-baseline design with each skill. Results from the PSS were combined and averaged for each BCBA.

Procedure

After supervisors expressed interest in participation (e.g., replying to a recruitment flyer by contacting the primary investigator by email), the primary investigator provided them with the consent form. After completion of the consent form, they were asked to complete a demographic data form. Demographic information collected from each participant included the participant's age, ethnicity, gender, number of years in their current position, and level of education or training.

Similarly, after direct-care staff consented to participation, the primary investigator provided them with the PSS. Participants were provided with specific instructions detailing how to complete the questionnaires and return them to the primary investigator. Estimated completion time for each questionnaire was about 10 minutes.

Baseline. Behavior analysts were observed during supervision sessions of treatment integrity checks with their staff. Treatment integrity checks are common supervisory activities in

which a BCBA observes direct-care staff running a skill acquisition program with a client and evaluates their percentage of accuracy regarding the implementation of the program. Checks such as these maintain the fidelity and quality of the services that are provided to individuals with ASD. In baseline, no instructions were provided to the BCBA, other than to conduct a treatment integrity check for staff as they usually would. As was standard in the center where the study took place, the BCBA took data on the direct-care staff's correct and incorrect implementation of each step of the teaching procedure using a task analysis. Though feedback is provided for treatment integrity checks regularly, the PI requested that the BCBA provide feedback to the direct-care staff immediately following the observation. Again, the BCBA provided no instructions about the structure of the feedback. Feedback was typically provided in the classroom, while the individual with ASD completed an independent activity.

All sessions were videotaped and later scored by the PI. Sessions varied in length based on the teaching program observed for the purposes of the treatment integrity check and the feedback provided. The average length of observations was 4 minutes 44 seconds for Jessica (range, 2:30 – 10:07) and 3 minutes 39 seconds for Joe (range: 1:57 – 11:45). As described above, a task analysis for each skill (corrective feedback, feedback and empathetic statements) was used to determine percent correct for each skill throughout baseline sessions.

Behavioral skills training. BST was completed for each of the target skills one at a time. Following baseline, each step of BST was completed for each target skill and was followed by post-BST data collection. To determine the order in which skills were taught to each BCBA, baseline data were graphed and the skill with the most stable and low level of correctness was taught first. When the first skill was mastered, the next skill was selected using the same methods. The training for corrective feedback was completed for both participants at the same

time, with both participants present in the training. The empathetic statements training was completed second and was done separately to accommodate the participants' schedules.

For each supervisory skill, the six steps of BST were completed as follows: The PI first provided a rationale for the importance of each target skill and how to apply the skills in supervision situations. The PI provided a brief written description of each skill, and how it can be applied in supervisory contexts using task analyses. The PI then used mock TI checks to provide examples of corrective feedback to the BCBAs. Participants were given completed TI forms and the PI modeled giving corrective feedback based on the results, then asked the participants to provide the corrective feedback they would provide based on the scores on the form. After the participants provided corrective feedback, the PI gave them feedback on their performance using both corrective feedback for errors and reinforcement for correct responses.

To model examples of empathetic statements, the PI utilized examples from baseline sessions and provided examples of when the BCBA could have used an empathy statement. Trainees rehearsed the skills through a live role-play with the PI and the PI provided feedback to the trainee while they practiced the target skills. The PI collected data on correct implementation of the skill using the task analysis for that skill. Feedback consisted of both supportive and corrective feedback. Role-play and feedback were repeated until mastery was reached. Mastery criterion was set at 100% success based on a task analysis for each skill as per Miles and Wilder (2009).

Post-Training Procedures identical to baseline were followed. Post-training data were collected until BCBA participants demonstrated consistent use of the target skill at 100% accuracy across three sessions.

Treatment Integrity

Treatment integrity measurement for the BST procedures was completed by a trained researcher through observation of the PI for one full BST training with one BCBA. Behavioral skills training was completed with 100% accuracy.

Results

Demographic Information

Jessica was a 33-year-old, Caucasian, female with a master's degree in social work and 7 years of direct care experience working with individuals with ASD and an additional 4 years of experience in her current supervisory position. She held a BCBA credential as well as a social work license. Joe was a 36-year-old, Caucasian, male with a doctorate in education and 6 years of direct care experience working with individuals with ASD and an additional 4 years, 6 months experience in his current supervisory position. He held a Board Certified Behavior Analyst – Doctoral Designation (BCBA-D) credential.

Of the direct-care staff, Kristin was a 63-year-old, white, female with some college education and 25 years, 6 months of experience as a direct-care staff for individuals with ASD; she had been in her current position for 18 years, 9 months. Sarah was a 25-year-old, Caucasian female with a bachelor's degree and 5 years of direct-care experience and 1 year, 10 months of experience in her current position. Reagan was a 42-year-old, Caucasian female with a master's degree in special education and 11 years of direct-care experience and 1 year, 6 months of experience in her current position. Louis was a 46-year-old, white male with a high school diploma and 19 years of direct-care experience all of which were in his current position.

Behavioral Skills Training

During baseline, corrective feedback had the most stable levels for both participants and was the first skill taught to both participants. Because of this, BST for corrective feedback was conducted with both participants at the same time by the primary investigator. Jessica had low levels of correct implementation on the corrective feedback TA during baseline (25%, 50%, and 50%), which increased to 100% correct implantation during all sessions following the BST. She mastered the skill after three sessions. Joe had low levels of percent correct on the corrective feedback TA during baseline (0%, 0%, and 0%), which increased to 100% accuracy during most sessions following the BST, with one exception in which 50% accuracy was observed. He mastered the skill after six sessions.

Providing empathetic statements was the second skill taught to both BCBAs. BST for empathetic statements was completed for each participant separately by the primary investigator. Jessica had low, stable levels of correct implementation on the empathetic statements TA during baseline (40% on each of 6 sessions). After BST, use of empathetic statements increased to 80% accuracy for one session then 100% accuracy for three sessions. She mastered the skill after four sessions. Joe had low, variable levels of correctness on the empathetic statements TA during baseline (average 25.5%), which increased to mastery levels immediately following BST. He mastered the skill after three sessions.

Both BCBA participants reached mastery criteria (100% over 3 sessions) for reinforcement before training could be implemented; therefore, BST was not implemented for this skill. Jessica had highly variable levels of correct implementation of reinforcement before BST, which stabilized following training for corrective feedback and maintained at mastery levels after empathetic statements training. Joe had high, stable levels of reinforcement

beginning with his first session. He maintained mastery levels through all sessions except for

session 8 in which no reinforcement was observed. Reinforcement returned to mastery levels

after session 8 and maintained through the final empathetic statements session.
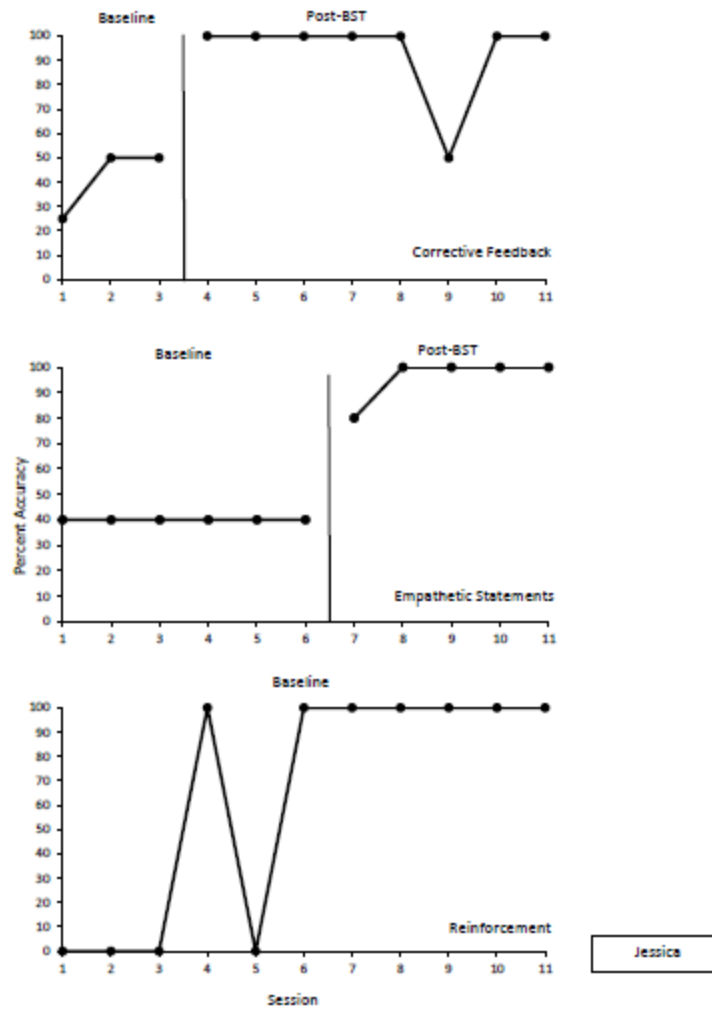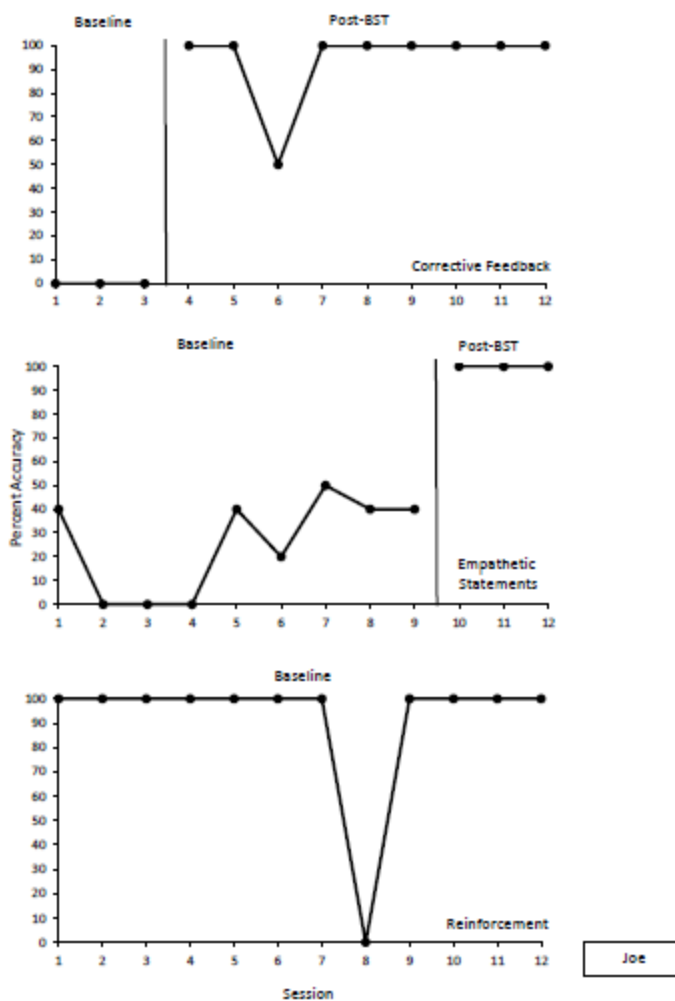
Table 1

Jessica's BST Results

Table 2

Joe's BST Results

Perceived Supervisor Support Scale

Direct-care staff completed the PSS and were asked to think about either Jessica or Joe while completing the scale. Kristin, Reagan, and Louis were asked to think about Jessica and Sarah was asked to think about Joe (Don was initially assigned to Joe, but was dropped from the study after he was assigned to a new program within the school). Initial staff ratings of both Joe and Jessica were primarily positive. Very little change was seen across the rating scales following

BST of supervisory skills, with ratings remaining positive across all three ratings. Because of the

BCBAs' mastery of reinforcement without the implementation of BST, only three rounds of

rating scales were completed by staff instead of the original four that were planned.

Table 3

Jessica PSS Results – Average Ratings

Item	Time		
	1	2	3
My supervisor values my contribution.	5.67	5.67	5.67
My supervisor fails to appreciate any extra effort from me.	.33	.33	.33
My supervisor would ignore any complaint from me.	0	0	0
My supervisor really cares about my well-being.	5.67	5.67	5.67
Even if I did the best job possible, my supervisor would fail to notice.	0	.33	.33
My supervisor cares about my general satisfaction at work.	6	4.33	5.67
My supervisor shows very little concern for me.	0	.33	.33
My supervisor takes pride in my accomplishments at work.	6	5.67	5.67

Table 4

Joe PSS Results

Item	Time		
	1	2	3
My supervisor values my contribution.	6	6	6
My supervisor fails to appreciate any extra effort from me.	0	0	0
My supervisor would ignore any complaint from me.	1	0	0

Table 4 - Continued

My supervisor really cares about my well-being.	6	6	6
Even if I did the best job possible, my supervisor would fail to notice.	0	0	0
My supervisor cares about my general satisfaction at work.	6	6	6
My supervisor shows very little concern for me.	0	0	0
My supervisor takes pride in my accomplishments at work.	6	6	6

Discussion

This is the first study to evaluate the efficacy of behavioral skills training with behavior analysts for any skill. Based on literature suggesting that staff burnout and stress could be moderated by strong supervisor support (Gibson et al., 2009), it was determined that the skills of corrective feedback, empathetic statements, and reinforcement would be meaningful targets for BST with behavior analysts. Given previous research highlighting the effectiveness of behavioral skills training for teaching people new skills and techniques (Turner et al., 2016), it was predicted that BCBAs' use of the target skills would be low during baseline and increase to mastery levels (100% accuracy over 3 sessions) following BST. It was also hypothesized that direct-care staff would provide low ratings of perceived supervisor support before BCBA training, which would increase following BCBA mastery of target skills.

Behavioral Skills Training

Before behavioral skills training, both Jessica and Joe had low levels of accuracy for both corrective feedback and empathetic statements. Jessica also had low levels of accuracy for reinforcement. Following behavioral skills training, both BCBAs mastered providing effective corrective feedback and using empathetic statements in their feedback with staff. This suggests

that BST is an effective strategy for training behavior analysts. These results replicate other studies which found that BST can effectively train and teach non-behavior analysts (Dart et al., 2017; Hogan et al., 2015; Lavie & Sturmey, 2002; Sarokoff & Sturmey, 2004). This adds to behavior analytic literature by presenting data which suggests that BST can be an effective tool for teaching behavior analysts supervisory skills as well. This is the first study to examine the use of BST to teach supervisory skills in the area of ABA.

Another contribution this study makes is taking a first step in teaching behavior analysts how to use compassion in their work. Taylor et al. (2018) suggested that the first step of improving compassionate care by behavior analysts was developing an effective training model for teaching the components of compassionate care. The results of the current study suggest that BST could effectively teaching clinical skills needed to build a therapeutic relationship with families and a strong supervisory relationship with direct-care staff. An additional benefit of BST for training these target skills with behavior analysts is breaking down skills using task analyses. Sometimes supervisory skills such as corrective feedback or using effective listening behaviors (e.g., nodding, encouraging the speaker, etc.) can be complicated to explain and trainees can benefit from the skills being broken down into smaller, more discrete behaviors.

Reinforcement was not targeted by BST in the current study because both behavior analysts mastered this skill without BST. Joe displayed high levels of accuracy for use of reinforcement during all baseline sessions. Jessica mastered the use of reinforcement without BST for this skill. Reinforcement is a skill that is taught to BCBAs during their training (BACB 4th Edition Task List, 2014) and this skill could easily generalize into their work with supervisees. This could account for Joe's consistently high baseline level of reinforcement.

An interesting result was seen in Jessica's use of reinforcement during baseline and after the training for corrective feedback. Initially, Jessica demonstrated low levels of reinforcement during her feedback sessions with staff. It could be possible that after her corrective feedback training, she happened to be speaking with staff for a longer duration, which naturally led to the opportunity to provide more reinforcement. These BCBAs also reported that before participation in this study, they typically utilized paper rubrics to provide feedback rather than providing verbal feedback face-to-face. This could account for their initial difficulty utilizing the target skills during feedback sessions before trainings took place before the behavior increased.

Further, to account for the increase in reinforcement used once Jessica mastered the use of corrective feedback, Jessica could have felt the need to "counteract" the corrective feedback she was now providing by giving more reinforcement or praise statements to her staff. During a conversation Jessica and the PI had prior to data collection, Jessica shared that she avoids providing feedback directly to staff and typically provided the TI check paperwork to the staff without direct verbal commentary. She explained that she felt uncomfortable providing feedback and often avoids this step of supervision because it can feel confrontational. Jessica's reinforcement levels may have increased as she acquired skills in corrective feedback to counteract her discomfort with this skill. Research suggests that a combination of corrective feedback and reinforcement is ideal, whether delivered as a "feedback sandwich" (praise – correction – praise) or in another combination (Henley & DiGennaro Reed, 2015). It is possible that Jessica encountered the concept of the feedback sandwich at another point in her training, which could be a reason for this increase in reinforcement following the corrective feedback training. Although it is likely that both Jessica and Joe had been exposed to some amount of

supervisor training – all BCBA supervisors are required to complete an eight-hour training –

their prior experiences with supervisor training were not assessed in this study.

Following corrective feedback and empathy training, Jessica shared that she was "feeling

better about giving feedback." Although not a research question in this study, behavior analysts'

perceptions of their own competence in providing feedback could be an area for further research

which could potentially investigate BCBA perceptions and perceived competence of providing

feedback to direct-care staff. A major area of importance in ABA research is social validity, or

measuring the social importance of the research. In 1978, Wolf proposed three measures that

behavior analysts could use to evaluate the social validity of their research and other work: social

significance of the goals, social appropriateness of the procedures, and social importance of the

effects. The effectiveness of treatments in ABA is often measured based on meaningful change

in behavior as opposed to statistical change in behavior. To that end, measures of social validity

are often used to evaluate the acceptability of treatment. A limitation of this study was the lack of

social validity measures. Further research could evaluate BCBA acceptability of BST for

supervisor training. Future research should include a social validity component for the BCBAs.

Possible questions could include, "Did BCBAs think these were good first steps for supervisor

training?", "How did BCBAs like the approach to teaching?" and "Do BCBAs think empathy is

valuable in supervision?"

Perceived Supervisor Support

The second research question, which focused on staff's perceived supervisor support,

showed little change over the time BST was implemented. Each staff member rated their

supervisor highly during baseline and these scores generally remained stable following each

behavioral skills training. Anecdotally, it is notable that Joe and Jessica are both well-liked,

friendly supervisors who have good reputations within their program for being kind and easy to work with. It is possible that for a less personable BCBA, these ratings would have shown more change following the mastery of the target skills. Additionally, the study had a small sample size of direct-care participants. Because of this small sample size ($n = 4$), these results should be interpreted with caution. It is highly likely that these results do not represent most ABA direct-care staff's experiences with supervision from BCBAs (Gibson et al., 2009), rather these numbers represent the experiences of these individual participants.

An important distinction between this study and earlier research is the intensity of the setting. Many ABA direct-care staff work in settings such as clinics, public schools, and client's homes, which offer far less supervision than the specialized day program highlighted in this study. When analyzing staff ratings, it is important to consider that these research-based interactions were not happening in a vacuum. Anecdotally, staff interacted with the behavior analysts daily throughout the study. Jessica and Joe could have utilized supervisory skills, including providing reinforcement and empathy, outside of treatment integrity contexts. This might include providing support following episodes of client challenging behavior, or during other training exercises. The use of these skills was not measured in the current study and could be an area for further research.

Additionally, while Gibson et al. (2009) asserted that levels of perceived supervisor support would be higher when supervisors utilized empathy and delivered high levels or praise and reinforcement, it is possible that the target skills (e.g., corrective feedback, empathetic statements) do not have as much of an impact of perceived supervisor support as reported in the literature. Other supportive behaviors (e.g., providing backup during challenging behavior, helping to take data) may have even more impact. Jessica and Joe could have been engaging in

other supportive behaviors that might counteract low levels of the corrective feedback and empathetic statements observed at baseline and resulted in the consistently high average ratings of supervisor support reported by direct-care staff.

Limitations and Future Directions

As discussed above, it is possible that the perceived supervisor support scale was not sensitive enough to evaluate staff perceptions of support because of the small sample of direct-care staff. Future research should evaluate perceived supervisor support with a larger number of direct-care staff. Researchers could measure direct-care staff's level of burnout in relation to their perceived supervisor support. Current available research suggests that higher rates of burnout are seen in direct-care staff with lower perceived supervisor support (Gibson, Grey, & Hastings, 2009). Additionally, more research needs to be completed on the overall level of burnout of ABA therapists working with individuals with ASD. There is a lack of research regarding the burnout rates of ABA therapists and the need for these individuals is only going to increase as knowledge of effective treatment for ASD and the prevalence of ASD increases in the United States.

One major limitation of this study is the low interobserver agreement on empathetic statements. A possible reason for this low agreement is inadequate training from the PI for the second rater, a BCBA research assistant. A more likely reason is that reading emotionality is inherently subjective making it difficult to operationally define. Most disagreement on this measure came when the PI and research assistant disagreed on the staff's observable emotional state. For example, the PI, a school psychologist and BCBA, typically viewed a direct-care staff member's lack of facial expression and no verbal engagement with the BCBA as a negative

emotion (e.g., disappointment, frustration, sadness) while the research assistant, a BCBA, viewed the same cues as a neutral, professional interaction.

This difference in emotion labeling emphasizes the challenges noted in LeBlanc et al. (2019) in which BCBAs reported the training they received in utilizing compassion and empathy within their professional practice. Most respondents reported that they did not receive training in these areas in their BCBA training and if they did receive training in compassion or empathy that it was typically in coursework or fieldwork hours for an additional credential. Unfortunately, effectively employing empathy behaviors relies heavily on the ability to detect another person's emotional state or at least the ability to relate one's own experiences to that of another. Both skills are difficult to teach and historically require the clinician being "in-tune" with their client. Some research in medical training focuses on this topic (Bas-Sarmiento et al., 2019; Batt-Rawden, Chisolm, Anton, & Flickinger, 2013; Boker, Shapiro, & Morrison, 2004) but there is a lack of literature on teaching empathy and compassion to those in the field of behavior analysis (LeBlanc et al., 2019; Taylor et al., 2018).

Some research is available on how emotion detection varies across different groups (i.e., those with high levels of anxiety vs. those with typical levels of anxiety; Schofield, Coles, & Gibb, 2007) but little research is available on teaching emotion detection skills to adults. A future direction based on this limitation is to develop operational definitions for various observable emotions with more detail with to ensure more concordance between individual observer's perceptions of staff emotionality. A possible supplement to the training done in this study is the addition of emotion detection training. One possibility is to provide trainees with a list of emotion terms; this can be helpful for expanding a clinician's emotional vocabulary. A study focused on building emotional knowledge and vocabulary in young children (Joseph &

Strain, 2003) found that the addition of a list of emotion words paired with emotion-centered

teaching in their classroom led to better discrimination in identifying their own feelings and the

feelings of others more accurately. A similar tool could be used to increase emotion detection

abilities in behavior analysts.

A final limitation of the current study was the BCBAs' mastery of the use of

reinforcement before BST was implemented. Based on the available literature (Gibson et al.,

2009) it was assumed that the use of reinforcement with staff would be low without specific

teaching. However, both BCBAs reached mastery of this skill without BST. Future research

could survey BCBAs to learn about what skills they feel they need the most teaching in to

determine appropriate skills to teach before choosing target skills. As this is the first known

study to implement BST directly with BCBAs, using behavioral skills training for another set of

skills for behavior analysts would be a good branch off this research. This design could be used

to train certified behavior analysts in a variety of skills including more supervision skills, skills

for developing therapeutic relationships (LeBlanc et al., 2019), and supporting staff and

caregivers during episodes of challenging behavior.

Conclusion

Overall, behavioral skills training is an effective and valuable training strategy for

behavior analysts to learn and master essential supervisory skills. These results have implications

for the field of behavior analysis. As more children are diagnosed with ASD, the need for highly

competent behavior analysts is increasing. For BCBAs to be effective in their treatment of

children and adults with ASD, they must be able to build relationships with their clients, the

client's families, and the direct-care staff working with their clients each day. The current

perception of behavior analysis is that those working as BCBAs can be cold and hard to connect

with (LeBlanc et al., 2019). Although the current best-practice for treating individuals with ASD is ABA, consumer perception of BCBAs hinders the field's growth and acceptance by families and professionals working directly with people with ASD. In order to increase acceptance of behavior analysis and improve the ability of BCBAs working with direct-care staff and families, graduate programs training BCBAs and schools and centers employing BCBAs must seek to add compassionate care and supervision training to their coursework and continuing education. Although more research is needed, this study suggests that BST could be a strategy used in these settings to teach critical skills to BCBAs.

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Appendix A

Behavioral Skills Training and Supervision Study

Be part of an important ABA research study:
- Are you a Board Certified Behavior Analyst at Douglass?
  - Do you want to improve your supervisory skills?

If you answered YES to these questions, you may be eligible to participate in a research study.

The purpose of this research study is to learn more about how we can use behavioral skills training with BCBAs to improve supervisory relationships.

This study is being conducted at the Douglass Developmental Disabilities Center.

Please email Allie Hawkins at aph68@gsapp.rutgers.edu for more information.

Appendix B

Behavioral Skills Training and Supervision Study

Be part of an important ABA research study:
- Are you a teacher, lead instructor, or teaching assistant at Douglass?
- Do you want to help improve supervision styles at the DDDC?

If you answered YES to these questions, you may be eligible to participate in a research study.

The purpose of this research study is to learn more about how we can use behavioral skills training with BCBAs to improve supervisory relationships.

This study is being conducted at the Douglass Developmental Disabilities Center.

Please email Allie Hawkins at aph68@gsapp.rutgers.edu for more information.

Appendix C

CONSENT TO TAKE PART IN A RESEARCH STUDY

TITLE OF STUDY: Evaluating Behavioral Skills Training with Behavior Analysts to Increase Use of Essential Supervisory Skills
Principal Investigator: Allison Hawkins

This informed consent form provides information about a research study and what will be asked of you if you choose to take part in it. If you have any questions now or during the study, if you choose to take part in it, you should feel free to ask them and should expect to be given answers you completely understand. It is your choice whether to take part in the research. Your alternative to taking part is not to take part in the research.

After all of your questions have been answered and you wish to take part in the research study, you will be asked to sign this informed consent form. You are not giving up any of your legal rights by agreeing to take part in this research or by signing this consent form.

Who is conducting this research study?
Allison Hawkins, a doctoral student in the Graduate School of Applied and Professional Psychology, is the Principal Investigator of this research study. A Principal Investigator has the overall responsibility for the conduct of the research. However, there are often other individuals who are part of the research team. Dr. Kate Fiske is the faculty advisor for Ms. Hawkins' research, and will have access to data collected in this study.

Allison Hawkins may be reached at 848-932-9865 or 151 Ryders Lane New Brunswick, NJ 08901-8557.

Allison Hawkins or another member of the study team will also be asked to sign this informed consent. You will be given a copy of the signed consent form to keep.

Why is this study being done?
The study is being completed in order to determine if behavioral skills training can help Behavior Analysts increase their use of desirable supervision skills.

Who may take part in this study and who may not?
Board Certified Behavior Analysts who currently consult to and directly supervise direct-care staff (teachers, lead instructors, and teaching assistants), as well as the direct-care professionals that the behavior analysts consult to.

Why have I been asked to take part in this study?
You have been asked to take part in this study because you work at the DDDC and meet the criteria to be included in the study because you are a behavior analyst at the Douglass Developmental Disabilities Center.

How long will the study take and how many subjects will take part?
The study will take no longer than three months. Approximately 21 individuals will take part in the study.

What will I be asked to do if I take part in this study?
You will be asked to participate in training for three target supervisory skills. Each of these three trainings will last approximately 30-60 minutes. You will also be observed during standard treatment integrity checks with your staff before and after these trainings. Data will be collected on your use of supervisory skills during training and feedback sessions with staff. Integrity checks will take place 2-3 days per week until each skill is mastered and will be observed and/or recorded each time. Additionally, direct-care staff (teachers, lead instructors, teaching assistants) who consent to participation will complete questionnaires about their supervisory relationship with you.

What are the risks and/or discomforts I might experience if I take part in this study?
A potential risk of the study is that you may feel occasional discomfort or embarrassment related to being observed, or from receiving feedback on your performance from the primary investigator during training of supervisory skills. Your participation will not affect your employment at the DDDC.

Are there any benefits to me if I choose to take part in this study?
The benefits of taking part in this study may be improved professional relationships and improvement in supervisory skills.

However, it is possible that you may not receive any direct benefit from taking part in this study.

What are my alternatives if I do not want to take part in this study?
Your alternative is not to take part in this study.

How will I know if new information is learned that may affect whether I am willing to stay in the study?
During the study, you will be updated about any new information that may affect whether you are willing to continue taking part in the study. If new information is learned that may affect you after the study or your follow-up is completed, you will be contacted.

Will there be any cost to me to take part in this study?
There will be no cost to you to take part in this study.

Will I be paid to take part in this study?
You will not be paid to take part in this study.

How will information about me be kept private or confidential?

All efforts will be made to keep your personal information in your research record confidential, but total confidentiality cannot be guaranteed. All data collected on your skills and surveys that direct-care staff complete on their supervisory relationship with you will only be labeled using a unique identifying number. These data will only be seen by the research team, and will not be accessed by any other staff or administrators (other than Dr. Fiske) at the DDDC. All data sheets and data files will be kept in a locked cabinet at the DDDC or on a secure cloud-based server, which is only accessible by the research team.

What will happen if I do not wish to take part in the study or if I later decide not to stay in the study?
It is your choice whether to take part in the research. You may choose to take part, not to take part or you may change your mind and withdraw from the study at any time.

If you do not want to enter the study or decide to stop taking part, your relationship with the study staff will not change, and you may do so without penalty and without loss of benefits to which you are otherwise entitled.

You may also withdraw your consent for the use of data already collected about you, but you must do this in writing to Allison Hawkins (151 Ryders Lane New Brunswick, NJ 08901-8557).

If you decide to withdraw from the study for any reason, you may be asked to return for at least one additional visit for safety reasons.

Who can I call if I have questions?
If you have questions about taking part in this study or if you feel you may have suffered a research related injury, you can call the lead investigator: (Allison Hawkins, DDDC, 848-932-9865)

If you have questions about your rights as a research subject, you can call the IRB Director at: New Brunswick/Piscataway ArtSci IRB or the Rutgers Human Subjects Protection Program at (973)972-1149 in Newark or (732)235-8578 in New Brunswick.

AGREEMENT TO PARTICIPATE

1. Subject consent:

I have read this entire consent form, or it has been read to me, and I believe that I understand what has been discussed. All of my questions about this form and this study have been answered. I agree to take part in this study.

Subject Name:

Subject Signature: _____ Date: _____

2. Signature of Investigator/Individual Obtaining Consent:

To the best of my ability, I have explained and discussed all the important details about the study including all of the information contained in this consent form.

Investigator/Person Obtaining Consent (printed name):

Signature: _____ Date: _____

Audio/Visual Addendum to Consent Form

You have already agreed to participate in a research study entitled: Evaluating Behavioral Skills Training with Behavior Analysts to Increase Use of Essential Supervisory Skills conducted by Allison Hawkins We are asking for your permission to allow us to audio and videotape as part of that research study. You do not have to agree to be recorded in order to participate in the main part of the study.

The recording(s) will be used for analysis by the research team and to complete interobserver agreement calculations.

The recording(s) will include full facial pictures but will not include participant's names. If you say anything that you believe at a later point may be hurtful and/or damage your reputation, then you can ask the interviewer to rewind the recording and record over such information OR you can ask that certain text be removed from the dataset/transcripts.

The recording(s) will be stored secure cloud-based server for 5 years following completion of the study.

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Subject (Print) _____

Subject Signature _____ Date _____

Principal Investigator Signature _____ Date _____

Appendix D

CONSENT TO TAKE PART IN A RESEARCH STUDY

TITLE OF STUDY: Evaluating Behavioral Skills Training with Behavior Analysts to Increase Use of Essential Supervisory Skills
Principal Investigator: Allison Hawkins

This informed consent form provides information about a research study and what will be asked of you if you choose to take part in it. If you have any questions now or during the study, if you choose to take part in it, you should feel free to ask them and should expect to be given answers you completely understand. It is your choice whether to take part in the research. Your alternative to taking part is not to take part in the research.

After all of your questions have been answered and you wish to take part in the research study, you will be asked to sign this informed consent form. You are not giving up any of your legal rights by agreeing to take part in this research or by signing this consent form.

Who is conducting this research study?
Allison Hawkins, a doctoral student in the Graduate School of Applied and Professional Psychology, is the Principal Investigator of this research study. A Principal Investigator has the overall responsibility for the conduct of the research. However, there are often other individuals who are part of the research team. Dr. Kate Fiske is the faculty advisor for Ms. Hawkins' research, and will have access to data collected in this study.

Allison Hawkins may be reached at 848-932-9865 or 151 Ryders Lane New Brunswick, NJ 08901-8557.

Allison Hawkins or another member of the study team will also be asked to sign this informed consent. You will be given a copy of the signed consent form to keep.

Why is this study being done?
The study is being completed in order to determine if behavioral skills training can help Behavior Analysts increase their use of desirable supervision tools.

Who may take part in this study and who may not?
Direct-care staff (teachers, lead instructors, and teaching assistants) who have worked at the DDDC for at least three months, as well as Board Certified Behavior Analysts who currently consult to and directly supervise direct-care staff.

Why have I been asked to take part in this study?
You have been asked to take part in this study because you work at the DDDC and have held a position as a teacher, lead instructor, or teaching assistant for three months.

How long will the study take and how many subjects will take part?
The study will take no longer than three months. Approximately 21 individuals will take part in the study.

What will I be asked to do if I take part in this study?
You will be asked to complete rating scale related to your perception of supervisor support at the DDDC approximately four times. Each time you are administered the rating scale, completing the questionnaire will take approximately 10 minutes. Additionally, you will take part in standard feedback sessions on the treatment integrity of your classroom teaching with your classroom behavior analyst. Integrity checks will take place 2-3 days per week until your supervisor masters each skill and will be observed and/or recorded each time.

What are the risks and/or discomforts I might experience if I take part in this study?
A potential risk of the study is that you may experience discomfort rating your relationship with your supervisor. Additionally, you may feel embarrassment or discomfort receiving feedback from your supervisor while being observed by another person. Your participation will not affect your employment at the DDDC or, if applicable, your enrollment in or credit for practicum at the DDDC.

Are there any benefits to me if I choose to take part in this study?
The benefits of taking part in this study may be improvement in skills addressed by your behavior analyst during treatment integrity sessions.

However, it is possible that you may not receive any direct benefit from taking part in this study.

What are my alternatives if I do not want to take part in this study?
Your alternative is not to take part in this study.

How will I know if new information is learned that may affect whether I am willing to stay in the study?
During the study, you will be updated about any new information that may affect whether you are willing to continue taking part in the study. If new information is learned that may affect you after the study or your follow-up is completed, you will be contacted.

Will there be any cost to me to take part in this study?
There will be no cost to you to take part in this study.

Will I be paid to take part in this study?
You will not be paid to take part in this study.

How will information about me be kept private or confidential?

All efforts will be made to keep your personal information in your research record confidential, but total confidentiality cannot be guaranteed. All surveys you complete will only be labeled

using a unique identifying number. Your survey information will only be seen by the research team, and will not be accessed by your behavior analyst or any other staff or administrators (other than Dr. Fiske) at the DDDC. All data sheets and data files will be kept in a locked cabinet or on a secure cloud-based server at the DDDC, which is only accessible by the research team. However, the information that behavior analysts record on your treatment integrity in the classroom will be labeled with your name, as those data are part of standard treatment integrity checks regularly conducted at the DDDC and required for DDDC's educational operations. These data will not be considered research data, and will not be stored by the research team. They will be stored by the behavior analyst in accordance with DDDC school policy.

What will happen if I do not wish to take part in the study or if I later decide not to stay in the study?
It is your choice whether to take part in the research. You may choose to take part, not to take part or you may change your mind and withdraw from the study at any time.

If you do not want to enter the study or decide to stop taking part, your relationship with the study staff will not change, and you may do so without penalty and without loss of benefits to which you are otherwise entitled.

You may also withdraw your consent for the use of data already collected about you, but you must do this in writing to Allison Hawkins (151 Ryders Lane New Brunswick, NJ 08901-8557).

If you decide to withdraw from the study for any reason, you may be asked to return for at least one additional visit for safety reasons.

Who can I call if I have questions?
If you have questions about taking part in this study or if you feel you may have suffered a research related injury, you can call the lead investigator: (Allison Hawkins, DDDC, 848-932-9865)

If you have questions about your rights as a research subject, you can call the IRB Director at: New Brunswick/Piscataway ArtSci IRB or the Rutgers Human Subjects Protection Program at (973)972-1149 in Newark or (732)235-8578 in New Brunswick.

AGREEMENT TO PARTICIPATE

1. Subject consent:

I have read this entire consent form, or it has been read to me, and I believe that I understand what has been discussed. All of my questions about this form and this study have been answered. I agree to take part in this study.

Subject Name:

Subject Signature: Date:

2. Signature of Investigator/Individual Obtaining Consent:

To the best of my ability, I have explained and discussed all the important details about the study including all of the information contained in this consent form.

Investigator/Person Obtaining Consent (printed name):

Signature: Date:

Audio/Visual Addendum to Consent Form

You have already agreed to participate in a research study entitled: Evaluating Behavioral Skills Training with Behavior Analysts to Increase Use of Essential Supervisory Skills conducted by Allison Hawkins We are asking for your permission to allow us to audio and videotape as part of that research study. You do not have to agree to be recorded in order to participate in the main part of the study.

The recording(s) will be used for analysis by the research team and to complete interobserver agreement calculations.

The recording(s) will include full facial pictures but will not include participant's names. If you say anything that you believe at a later point may be hurtful and/or damage your reputation, then you can ask the interviewer to rewind the recording and record over such information OR you can ask that certain text be removed from the dataset/transcripts.

The recording(s) will be stored secure cloud-based server for 5 years following completion of the study.

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Subject (Print) _____

Subject Signature _____ Date _____

Principal Investigator Signature _____ Date _____

Appendix E

Demographics Questionnaire

Age: _____

Ethnicity: _____

Gender:_____

Number of years/months in current position: _____

Highest Degree Held: _____

What is the total number of years you have worked as a direct care staff for individuals with ASD in any setting, including the DDDC? _____

Appendix F

Perceived Supervisor Support Scale
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Listed below are statements that represent possible opinions that YOU may have about working at the DDDC. Please indicate the degree of your agreement or disagreement with each statement by filling in the circle on your answer sheet that best represents your point of view about your supervisor. Please choose from the following answers:

0 – Strongly Disagree	1 – Moderately Disagree	2 – Slightly Disagree	3 – Neither Agree nor Disagree	4 – Slightly Agree	5 – Moderately Agree	6 – Strongly Agree

1. My supervisor values my contribution.
   Rating:

2. My supervisor fails to appreciate any extra effort from me.
   Rating:

3. My supervisor would ignore any complaint from me.
   Rating:

4. My supervisor really cares about my well-being.
   Rating:

5. Even if I did the best job possible, my supervisor would fail to notice.
   Rating:

6. My supervisor cares about my general satisfaction at work.
   Rating:

7. My supervisor shows very little concern for me.
   Rating:

8. My supervisor takes pride in my accomplishments at work.
   Rating:

Appendix G

BCBA Data Collection Sheets

Corrective Feedback	
1. Identify and state error(s)	
2. Provide information on how to fix error next time	
3. Ask staff if they have any questions	
4. Answer any questions	

Reinforcement	
1. Identify and state correct steps	
2. Provide behavior-specific praise for each step	

Empathetic statements	
1. Makes eye contact	
2. Uses reassuring tone of voice	
3. Identifies and responds appropriately to nonverbal cues (e.g., lack of eye contact, sad facial expression) AND/OR Paraphrases back staff's emotional statements	
4. Acknowledges and names the staff's feeling (e.g., "You seem frustrated.)	
5. Verifies the emotional response as reasonable	