Promoting Compassionate Care in an Alternate Education Setting:
An Application of the Teaching Interaction Procedure

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Applied behavior analysis (ABA) is widely used in special education to support academic learning and prosocial behavioral skill development. ABA grew rapidly from the development of Early Intensive Behavior Intervention in the 1970's to become a modern 'treatment' for autism and other disabilities. ABA was founded and refined under the medical model of disability and has been marketed as a method to make autistic individuals 'indistinguishable from their peers'. With this history, there is widespread controversy around ABA and advocacy against the practice. Autistic adults frequently report physical or emotional harm caused by ABA in their childhood, having been subjected to harsh and stringent practices. Practitioners of ABA are reforming practices and adopting a more compassionate approach. The ABA literature is beginning to operationally define compassionate care in behavior analytic terms and literature in this topic is steadily increasing.

This study attempted to provide training to paraprofessionals to build skills related to compassionate care. The teaching interaction procedure was used to teach the skills of building and repairing relationships, acknowledging assent and assent withdrawal, and setting and holding boundaries. In class performance feedback provided real-time coaching to reinforce the skills and promote generalization to students in the classroom.

Student interviews confirmed the value of the student-teacher relationship and provided social validity of the goals. Participants completed the Compassion Scale and the Beliefs About

Behavior Scale to assess preexisting levels of compassion and underlying beliefs about factors that relate to student behavior. During each in-classroom observation, each discrete step of the skill was documented for a total percent accuracy score. Each participant demonstrated the ability to use these skills in the classroom with students. The paraprofessionals viewed the skills positively, believed they would have an impact on students, and would recommend them to other staff.

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Preface

I wish to express my deepest gratitude to my dissertation committee for their support and guidance throughout this process. Dr. Rachel Robertson, Dr. Todd Haydon, and Dr. Amy Srsic. Throughout this arduous yet rewarding journey, their support and expertise have been invaluable. They have shaped not only the trajectory of this research but also my growth as a scholarly practitioner.

The staff at SCC push the boundaries of education. Their willingness to engage in meaningful dialogue and challenge conventional wisdom has ignited my curiosity and fueled my desire to contribute meaningfully to this field. Your passion and love for students is unending.

My students past and present have inspired this work. I cannot go back and change the beginning, but I can start here and change the ending. As I, and this field, reckon with our past and seek to reform our future, you are at the center of this work. Your voices, perspectives, and boundless potential serve as hope and inspiration, guiding our efforts to build a more equitable and inclusive future.

My daughters remind me every day of the potential that exists within each of us. Their curiosity, resilience, and determination has fueled my own aspirations and reaffirmed my belief in the power of perseverance. A wise principal and EdD graduate told me that one of the most valuable parts of obtaining her doctorate was her children witnessing the power of determination in the pusuit of self-growth. I wholeheartedly agree.

While writing about the topic of this dissertation comes with relative ease, it is difficult to find words to thank my husband. I am profoundly grateful for his unwavering support and selfless

sacrifices throughout the last few years. The sacrifices, which are too many to count, have enabled me to dedicate the time and energy to focus on this important work and make it through. Bill, your presence in my life is a gift and I am eternally grateful to you.

"You can't go back and change the beginning, but you can start where you are and change the ending." C.S. Lewis

1.0 Introduction: Naming and Framing the Problem of Practice

Applied behavior analysis (ABA) has been a leading intervention for Autism and other developmental disabilities since the 1970s. ABA grew out of theories of behaviorism in the 1900s, with Dr. John Watson and Dr. B. F. Skinner paving the way. Dr. Skinner pioneered theories of learning and described how events shape behavior. In the 1970s, Dr. Ivar Lovaas applied this learning to develop a program to teach language to young Autistic children, Early Intensive Behavioral Intervention (EIBI). This programming provided an average of 40 hours per week of intensive intervention. Literature on the effectiveness of EIBI from Dr. Lovaas (and the scholarship following) states that "a certain percentage can become indistinguishable from their peers" (Leaf et al., 2015). At its inception, practitioners of EIBI under Dr. Lovaas were scientific, innovative, and nimble. Scholars of ABA have quoted Dr. Lovaas as saying, "If a child cannot learn in the way we teach, we teach in the way the child can learn." From this program, the foundation of ABA intervention for Autistic children was born. Over time, as ABA grew into a large field, EIBI expanded beyond Dr. Lovaas and to staff with significantly less training. Like many quickly growing technologies, a risk is the reduction of fidelity in the intervention and the entire approach. The implementation of EIBI shifted toward prescriptive and rigid teaching styles. It included repetitive drills and highly structured and adult-driven teaching. Modern ABA is now widely utilized and accepted for its broad empirical support. It has strong evidence for teaching skills such as language, social skills, adaptive life skills, and reducing dangerous behavior to promote safety and greater access to the community for Autistic children. Over time, as ABA grew into a large field, EIBI expanded beyond Dr. Lovaas and to staff with significantly less training. Like many quickly growing technologies, a risk is the reduction of fidelity in the intervention and the entire

approach. The implementation of EIBI shifted toward prescriptive and rigid teaching styles. It included repetitive drills and highly structured and adult-driven teaching. Modern ABA is now widely utilized and accepted for its broad empirical support. It has strong evidence for teaching skills such as language, social skills, adaptive life skills, and reducing dangerous behavior to promote safety and greater access to the community.

ABA has evolved over the decades and has become known as a gold standard 'treatment' for Autism and is now commonly recommended by medical professionals. In 1998, the Behavior Analysis Certification Board began meeting the credentialing needs of practitioners of ABA. Board Certified Behavior Analysts (BCBA's) now number over 55,000, with 94% residing in the United States. Unfortunately, growing criticism of ABA exists as the young children who received ABA during the rapid expansion of the field are now self-advocating adults. There is a call from Autistic advocates and allies to ban ABA, reporting trauma and other damaging effects caused by ABA. This criticism is rooted in the lived experiences of Autistic people and, therefore, holds truth and validity. However, the field of ABA aims to improve the human condition through behavioral science and must engage in reform to serve children and families. Reform toward the compassionate application of applied behavior analysis is an urgent need. Compassionate care in ABA requires a practitioner to be flexible, empathetic to others' experiences, and utilize reflective listening to deepen understanding. Through compassionate ABA, "that which is championed is establishing trust, engagement, authenticity, and agency" (Hanley, 2021). Compassionate practitioners engage in treatment by listening, sparking joy in learners, and holding the goal of empowerment central to their practice. Compassionate ABA has been defined in the literature by applying a clinical definition of compassion to behavior analysis. A compassionate behavior analyst can identify and tact (i.e., comment on what is observed) the suffering of others through

perspective-taking, identifying personal experiences in their past, and relating those events to what another person may be experiencing. The compassionate behavior analyst intentionally changes their behavior to alleviate that person's suffering (Taylor et al., 2019).

Social validity is a central tenant of applied behavior analysis. ABA aims to improve the human condition by supporting the improvement of socially significant behaviors. Social validity refers to the extent to which clients believe services are making a positive impact. Kazdin (1977) and Wolf (1978), founders of modern-day ABA, described the importance of social validity. However, given ABA's analytical and objective nature, social validity remains under-measured in literature and practice. Wolf (1978) detailed three critical components of social validity: significance of the goals (i.e., are the goals what the client wants); appropriateness of the procedure (i.e., does the client consider the treatment procedures to be acceptable); and social importance of the effects (i.e., is the client satisfied with the results, including unexpected ones). Social validation plays a significant role in adopting and implementing evidence-based practices (Callahan, 2016). Practitioners must consider social validity to support meaningful outcomes.

Evidence indicates traits associated with behavioral artistry (Foxx, 1985) and compassion are rated more positively, and caregivers prefer characteristics of compassion. Compassionate care may enhance the social validity of ABA services and warrants further investigation. According to Taylor et al. (2019), "Both the centrality of compassion and empathy toward all lived experiences and the challenge of approaching compassion empirically and experimentally can, and should, compel our attention and inspire our best work." A compassionate practitioner demonstrates empathy and perspective-taking and shifts behavior to alleviate another person's concerns, distress, or pain. This skill requires the therapist to respond to discriminative cues of a private event, such as the client or caregiver's emotional state. A series of coordinated relations allow the therapist to

relate experiences in their past to what the client or caregiver is experiencing, for example, "if I were you, I would be experiencing…." This interaction has been considered 'relational competency' and is the foundation of compassionate care (Taylor et al., 2019). A study of parents of children receiving ABA services by Taylor et al. (2019) assessed parents' perception of relational characteristics. The authors identified participants through email lists, Facebook groups, and Autism advocacy groups of parents engaging in ABA services. The areas of listening and collaboration, empathy and compassion, and behaviors that contribute to problems in the therapeutic relationship were surveyed. Respondents rated behavior analysts high in listening and collaboration on listening to concerns during the first meeting and protecting confidentiality. Behavior analysts were rated low on compromising during a disagreement, inquiring about satisfaction, and role clarification.

Taylor et al. (2019) present a compelling argument for behavior analysis to improve compassionate care skills. However, this scholarship needs future replications and extensions to identify further the critical components of compassionate care and the corresponding skills. Taylor et al. (2019) developed training curriculums utilized in private practice that may serve as a basis for the study of teaching these skills and enhancing outcomes. However, the aim of the research and the corresponding curriculums focus on parent perception and relationships with parents. The literature is sparse regarding the perception of the recipient of behavior change services (i.e., the child). Adults who have discontinued services reported that ABA caused trauma and expressed dissatisfaction with services (Kupferstein, 2020). Therefore, future scholarship should evaluate the perception of compassionate care amongst Autistic children and adults and develop clear and comprehensive operational definitions of compassionate care related to interactions with the child.

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Rohrer et al. (2021) developed a procedural integrity tool for training early service BCBA's and RBTs to use compassionate care skills with parents and caregivers. The Compassionate Collaboration Tool assesses 33 provider behaviors broken down into two domains, Collaborative Approaches and Language/Communication. Behaviors in the Collaborative Approaches domain include items such as actively solicit input from family, incorporate family/client input, and ask questions about family/client values. Behaviors included in the Language/Communication domain include items such as avoid terms with negative connotation such as 'extinction', use vocabulary that matches the family's repertoire, use small talk to establish rapport, reflect the content ("it sounds like you are worried that..."), solicit questions, and use active/attentive listening (nonverbal and paralanguage skills, "mm-hmm," nodding, and mirroring facial expressions). Roher et al. (2021) successfully used behavioral skills training to teach these skills to fluency.

However, the aim of Taylor et al. (2019) and Rohrer et al. (2021) and the corresponding training materials focus on parent perception and relationships with parents. The literature is sparse regarding the perception of the recipient of behavior change services or specific behaviors and interpersonal skills for interacting with the recipient. Adults who have discontinued services reported that ABA caused trauma and expressed dissatisfaction with services (Kupferstein, 2020). Future scholarship should attempt to evaluate the perception of compassionate care amongst Autistic children and adults and develop clear and comprehensive operational definitions of compassionate care as it relates to interactions with the child him/herself.

1.1 Organizational System

The organization at the center of this problem of practice is an alternative social-communication school placement for students with significant support needs and communication and behavioral barriers. The Social Communication Program is a school-based program within the Education Service Center, a county-level educational organization. The name of the county has been retracted to ensure student anonymity. The ESC provides various services, from contracted related services, mental health services, special education supervision to school crisis response teams and truancy education and prevention. The ESC also operates seven alternative schools and a virtual academy. The Social Communication Classroom Program (SCC) is one of those seven schools.

The mission of the ESC as been identified as being a resource to the community by providing customized educational solutions for students and families. They ESC indicates a value of high-quality and cost-effective services which allow school district parnterships. These partnerships are developed with the goal of promoting safe learning environments, opportunities for growth and improving quality of life.

The Superintendent oversees the Executive leadership, including two Assistant Superintendents and three Executive Directors. Department Directors include Executive Directors of Social Emotional Learning Programs, Special Education Programs, and Cognitive Behavioral Health Programs. The school based programs each have building-level leadership, who report to the Executive Director of Special Education Programs, who then report to one of the Assistant Superintendents. This line of leadership has regular leadership meetings. The Executive Director for Cognitive Behavioral Health Programs provides consultation and coaching on Positive Behavior Interventions and Support to all school-based programs, including SCC, and occasionally

visits the building. SCC has three building-level administrators, a supervisor, an assistant supervisor, and a program specialist. This person is also the Director of the Western Row Campus, which logistically manages the building's use. The author of this paper provides direct ABA services to the Social Communication Classroom Program and supervises the Collaborative Coaching Department, a team of BCBAs, Behavior Interventionists, and RBTs contracted to local districts.

The mission of SCC is to educate students with autism and other low incidence disorders to promote independce and quality of life. There are approximately 120 students in the program across 14 classrooms in kindergarten through transition to adulthood. Each student in the program is eligible for special education services and receives the support of an Individualized Education Plan (IEP). The student's IEP team has determined that a more restrictive setting is necessary, and their least restrictive environment (LRE) was changed from a general education environment to an alternative placement. Due to the nature and severity of their disability, their level of support needs, and their home district's inability to provide a breadth of services to meet their needs, SCC was chosen as the most appropriate setting. The home district pays tuition to SCC and transports students to and from school. Students attend SCC from across a multi-county area.

Each classroom is led by an Intervention Specialist (IS) and a Classroom Technician (CT). The Classroom Technician is responsible for the day-to-day operation of the classroom, running the schedule, and delivering some instruction provided by the IS. The Intervention Specialist is the licensed teacher responsible for specially designed instruction and curriculum. Classrooms typically have a ratio of up to eight students and four to five staff. Some students have a one-to-one paraprofessional, as determined by their IEP. A few students receive their education in a

separate classroom full-time with one or two staff. This is determined based on the level of behavior support required, safety, and intensity of behavior.

Many students in the program engage in severe behavior, such as intense aggression and self-injury, necessitating crisis management. While the school has identified safety and reduction of restraint and seclusion as program goals, there remains a high number of crisis incidents resulting in physical management requiring the response of multiple staff. Most days, there is at least one incident of restraint, seclusion, or transport (RST). During crisis incidents, staff may experience a decreased sense of personal safety or, potentially, physical injury, which can trigger emotional responding.

Staff use applied behavior analysis (ABA) to support behavior change. The school employs two Board Certified Behavior Analysts (BCBA), three Registered Behavior Technicians (RBT), and several behavior interventionists (non-registered highly qualified paraprofessionals) who make up a team of specialists that support behavior interventions. Behavior interventionists are placed in classroom settings to support classrooms with more intense behavior needs. Some students in the program have a one-on-one behavior interventionist assigned per their IEP. The behavior support team trains, coaches, and monitors behavior intervention plans and the overall implementation of evidence-based practices. The program contracts with a Ph.D. level practitioner who is dually licensed as a BCBA and LISW. He provides collaborative problem-solving for students with dual diagnosis and professional development on mental health and trauma. Another contracted service is a doctoral-level professor from a local university's school of education. This service provides coaching for evidence-based instructional practices for Autism spectrum disorder and consultation and training for staff.

In applied behavior analysis, practitioners may engage in services with a lack of compassionate care and devoid of necessary interpersonal skills, and this place of practice is not immune to this problem. Reform toward compassionate care is an urgent need. One can observe a lack of compassion in student interactions and the developed behavior plans. On observation, one can see the staunch application of ABA in the coercive application of reinforcement systems and punishment procedures being commonplace (i.e., escape extinction is a norm). Establishing rapport is often spoken of, but some staff lack the knowledge and skill to build rapport with students they perceive as challenging. Staff do not routinely employ empathetic and reflective listening when a student expresses frustration or emotional responding. Instead, they may reply with, "the expectation right now is to…". Staff do not regularly obtain consent or assent from the students prior to behavioral interventions, nor are they routinely involved in planning to promote self-determination. Hand-over-hand assistance and physical guidance are often initial prompting methods and are not routinely and systematically faded. Students lose bodily autonomy when staff use restrictive teaching methods. Staff can be observed to engage in 'compliance training,' which often looks like a 'power struggle', both parties refusing to engage in the behavior the other is requesting. Walking through the building, one of the most common phrases is, "what are you working for"? While seemingly a positive intervention, it is coercive in nature. When reinforcement is used this way, staff identify the child's favorite items and activities, set criteria based on their value system, and then withhold the item until the adult perceives that criterion is met.

The organization recognized the need for change, in part through a complaint with the state, which prompted changes in restraint and seclusion procedures. This marked a shift toward accepting compassionate care. With the continued conversation, changes in the conversation away

from compliance toward compassion continued over the 2021-2022 school year. This culminated in delivering a professional development training around compassion at the end of that school year. At the beginning of the 2022-2023 school year, a larger emphasis was placed on this topic, marking a greater shift away from compliance training.

There are factors in the organization that have facilitated this shift toward improving student-centered and compassionate care and many people in the organization support change. The doctoral-level LISW consultant has advocated the need for reform. Understanding that many of our students come to school with significant trauma histories and mental health needs, he has shed light on the need for therapeutic classrooms. The behavior team is also allied to this change. This team consists of two BCBAs, three registered behavior technicians, one behavior interventionist specializing in mental health, and one licensed mental health specialist. This team is viewed in a position of authority in the building, and staff generally respect the opinions and recommendations of this team. This team can accomplish goals that other leadership is often not able to, given positive relationships with teachers and related staff. This team is not viewed in the negative light that 'administration' can sometimes be seen. Regarding administration, the building-level supervisors recognize, support, and are engaged with change toward compassionate care. They actively call out actions they observe that are not aligned and provide alternatives. They accept challenges to their ideas and beliefs. The program and administrators support ongoing professional development for all staff. This is a considerable strength in the change process. Building leadership support improvement and advocate for continuing education for all staff in the program. Continuing education and programmed professional development are a force for change.

Alternatively, forces against change exist in the system. There are teachers and support staff whose own learning histories support ways of engaging with children that are not aligned

with compassion. For example, there is an intervention termed 'planned ignoring.' This intervention removes adult attention as reinforcement from behavior deemed 'attention-seeking.' A compassionate approach aims to understand the root cause behind a behavior, reframing it as an attempt to fulfill a need. A compassionate educator may practice reflective listening and validate the student's perspective. Conversely, lacking this understanding and reframing, teachers and staff may adopt a compliance-based mindset, solely addressing attention-seeking behavior without consideration for its underlying causes. Educators holding such views may be resistance to change and stifle the implementation of more empathetic systems.

Undergirding the problem in practice is ableism and the medical model of disability. The belief that disabled students need 'fixing' is an ableist mindset that pervades special education. This program is not immune to this undercurrent. ABA has been identified as a treatment for autism, communicating that autism is to be cured like other medical conditions. With this mindset, providers are likely to justify their actions as valid and that the end justifies the means. However, disability justice advocates for a shift toward understanding neurodiversity as the acceptance that everyone has a different mind and way of being. Neurodiversity is a natural form of human diversity and should be accepted and celebrated, Bottema et al. (2021)

Equity and power within the organization are hierarchal, characterized by a rigid chain of command. Roles and responsibilities are meticulously defined, correlating with levels of authority. A pervasive statement within the organization is "stay in your lane," subtly implying limitations on individual power. While at the center of the work, students are the least empowered group. They are occasionally presented with choice. However, these choices are predetermined by staff, limiting genuine self-determination. Despite the program's mission to empower students, they are not treated as equal partners in their education and development which leads to persistent

behavioral challenges. A compassionate educational system would emphasize inclusion, equity, and justice for students and acknowledge authentic self-determination as a right.

As I further studied the system and interviewed staff, my understanding expanded to include the effects of burnout on compassion. This learning led me to incorporate this concept into my Fishbone Diagram (Appendix A.1). The program supports students with the most significant behavior support needs in the community. Building administrators support staff by implementing a PBIS Rewards system to reinforce staff to maintain high morale, recognizing that the job is difficult. Administration provides frequent events such as lunches, potluck carry-ins, donut breakfasts, paid food trucks, and other fun events for staff to show appreciation and counteract burnout. However, when severe aggression occurs toward a person, it remains challenging to maintain compassion. Furthermore, training is needed on topics such as self-compassion, interpersonal skills, and home-school connection. Time remains a barrier to accessing additional training.

Overall, this system is achieving the current results for many reasons. However, this problem is not localized to this place of practice. In fact, this place of practice is well-suited to the improvement process as it has many assets that will support change toward compassionate care. Building leadership is allied to change, and there are systemic supports that may be beneficial.

1.2 Missing Perspectives

The perspective of the students is critical to understanding this problem of practice. Many students in the program have limited vocal communication, and obtaining the student perspective will require individualized methods. Furthermore, the school operates under a business model,

serving local districts through tuition dollars. There may be uncomfortable statements or realities that need to be addressed if students are comprehensively interviewed about their perspectives and experiences in this school. Those perspectives must be believed as true and honest lived experiences. It could be convenient to sweep comments under the rug or explain perspective away as a symptom of a disability. However, the path toward reform, both in the system and in the field of ABA will require us to face and reckon with uncomfortable truths.

2.0 Statement of Problem of Practice

The problem of practice explored in this dissertation in practice is that practitioners of applied behavior analysis in school settings often practice without sufficient interpersonal skills, empathy, and compassion, which subsequently affects perception and satisfaction with the intervention.

Urgent problems exist in the organization, and many are consistent with those in the broader field of special education. The school experiences high teacher and paraprofessional turnover rates and staff shortages in the post-covid environment. Staff shortages affect the day-to-day operations of the building, leading teachers to make decisions they would not make if their classrooms had sufficient staffing. Many of the teachers in the program are first-year teachers or pursuing alternative licensure pathways. Due to fatigue and burnout, teachers may work in the program for a few years and then transition to a less restrictive school setting. In the long term, staff turnover results in training and re-training new staff on the core evidence-based practices integral to the program. Staff onboarding training is an ongoing problem in this place of practice.

Staff identifies safety as an urgent problem in the school. Many of the students served in the program engage in severe behavior, such as intense aggression and self-injury, resulting in crisis management. While the school has identified safety and reduction of restraint and seclusion as program goals, there remains a high number of crisis incidents resulting in physical management requiring the response of multiple staff. During these incidents, the staff is likely to experience injury and a decreased sense of personal safety, which can trigger their own emotional responding.

The behavior team comprised of BCBA and RBT's train staff to implement behavior intervention plans and accurately document behavior data. During the training and subsequent

follow-ups, intervention fidelity is a persistent problem. Before this year, this team systematically used behavioral skills training to teach staff new skills. A perspective exists in the building that the team of RBTs exists simply as a 'crisis management team' instead of a team to proactively build supports and systems to prevent crisis. Therefore, the behavior team is building their skillset of teaching and coaching adults. The role of the RBT in the building has evolved over recent years and now includes teacher coaching. The coach intentionally develops and fosters the teacher-coach relationship. The skills required to build a relationship to provide corrective feedback effectively are learned and honed over time.

The compassionate application of ABA is an urgent need. Now more than ever, positive teacher-student relationships are vital to success. Growing criticism of ABA exists as the young children who received ABA in their earlier years are now self-advocating adults. This criticism, while much of it well-conceived, is a threat to the field and its benefits. "A danger inherent in any large scale, quickly growing area is a loss of focus on meaningful purpose, process, and outcomes. In the field of ABA, this might translate into dogmatic lack of attention to clinical significance, selection of impractical procedures, ritualistic data-collection, over-abundant use of off-putting, dehumanizing terminology, disregard of logistical realities, and insensitivity to consumer issues." (Leaf et al., 2016)

Foxx (1998) elaborated on the term "behavioral artistry" and "…concluded that the effectiveness of ABA may be negatively impacted by a broad array of deficits in the behavioral five repertoires of practitioners." Behavioral Artists possess qualities that may lead to increased effectiveness and improved outcomes. Behavioral artists demonstrate seven measurable traits, sometimes identified as "soft skills" by other professions. Table 1 outlines these seven traits. Callahan & Foxx, 2019 defined behavioral artistry as the combination of these traits. Contrasted

with behavioral artists, "behavioral technologists" implement ABA in a strictly traditional manner. "BTs, according to Foxx, often appear to be practitioners who simply learn a set of scripted, manualized strategies, methods, and procedures and deliver them without much focus on the overall quality of the therapeutic interaction" (Callahan & Foxx, 2019). Traits associated with behavioral artistry have been shown to be socially valid among parents of children receiving services. Finally, therapists with higher percentages of traits associated with behavioral artistry "look better." "Importantly, we confirmed that therapists with a larger percentage of BA characteristics look qualitatively better delivering ABA therapy for children with Autism than those with fewer BA traits, at least on one key indicator of warmth, attentiveness, and liveliness, 'liking people.' In this case, "better" meant that behavioral artists simply looked like they enjoyed their clients more and appeared to be more caring, positive, and pleasant delivering ABA treatment than therapists who were less behaviorally artistic" (Callahan & Foxx, 2019). The first two traits of behavioral artistry, "like people" and "has perceptual sensitivity," are compassionate qualities. If the traits can be measured and result in improved outcomes, can these skills be taught? If behavioral artistry and compassion increased in the provision of services, would behavior plans be more effective? Would safety be increased?

Compassionate care and application of ABA link directly to the other enduring problems the school is facing. Behavioral artists demonstrate creativity in applying ABA and, perhaps, may require less direct training and coaching to implement new skills. If applied compassionately, a therapist listens to and reflects concerns and makes actionable steps to alleviate that person's suffering. The assessment and treatment model pioneered by Greg Hanley, Practical Functional Assessment and Skills-Based Treatment centers on goals of safety, televisibility, and rapport which are central tenets of compassionate care (Hanley et al., 2014). In this model, precursor

behaviors to severe problem behavior are immediately reinforced with a synthesized reinforcement contingency to eliminate the risk of escalation to a crisis, thus promoting safety.

Table 1 Behavioral Artistry Traits

"Likes people (able to establish rapport, demonstrates concern, and wants to facilitate positive change)	Has perceptive sensitivity (pays careful attention to important indicators of client behavior that may be subtle)
Doesn't like to fail (sees difficult clients as a personal challenge to overcome and as an opportunity for the client to succeed)	Has a sense of humor (recognizes and accepts that much in the educational and human services professions is bizarre, illogical, and humorous)
Is optimistic and sees behavior change in a "glass half-full" context; always believes programming will be successful; is less likely to burnout;	Is thick-skinned: doesn't take negative client actions towards herself or himself personally; maintains objectivity and positivity:
Is "self-actualized": does whatever is necessary and appropriate to facilitate and produce positive behavior change; is not under audience control; is creative."	

The leadership of this school supports trauma-informed care and trauma-informed behavior analysis. There is an overlap between trauma-informed behavior analysis (TIBA) and compassionate ABA. Compassionate ABA serves as a universal protocol applying to all students, while TIBA, in this school, currently informs practices of assessment and intervention for students

known to have a trauma history. A move toward compassionate care would broaden some of the principles of TIBA and require less of a mindset shift if TIBA were not already in place. It may be beneficial to this problem that most of the schools' leadership harkens from fields outside of ABA and, in some circumstances, from human service professions in which empathy is a crucial skill for therapists. The sphere of influence to support change includes the leadership team that already sees the value of compassion. The behavior team identifies that change is necessary, although it does not necessarily know how to define the need or to effect that change.

Systemic constraints exist that may prohibit the development of compassion in staff. Primarily, staff turnover results in frequent training and re-training of critical skills. Due to severe staffing shortages in the current social climate, leadership hired some staff into paraprofessional positions that may not have been in a typical school year. The past two school years, leadership did not have the freedom to select for 'soft skills' as carefully as they would in a year without staff shortages. As a result, some staff do not display empathy and compassion for students and view this work as simply a short-term job. Due to this difficulty, to effectively address the problem, changes will need to be made to onboarding staff and ongoing professional development processes. Additionally, the behavior team will need enhanced coaching skills and refined processes for appropriate and unacceptable interventions amongst paraprofessionals. A universal protocol that targets compassionate interaction will be necessary to change a culture of punishment, coercion, and forced compliance.

2.1 Review of Supporting Knowledge

This review aims to explore the concept of behavioral artistry and compassion in applied behavior analysis (ABA), the social validity of the associated traits, and the role of behavioral artistry in enhancing outcomes. Also included in this literature review is a review of factors related to client and caregiver dissatisfaction with ABA services and reasons for discontinuing services. This addition aims to understand the behavior analyst's role in dissatisfaction and the potential role of behavioral artistry. Finally, the teaching interaction procedure will be examined as a teaching methodology for training staff. This literature review seeks to answer the following questions:

1. Are personality traits (i.e., behavioral artistry) or relational skills of the instructor a factor in dissatisfaction with ABA?

2. Do factors related to behavioral artistry increase the acceptability (i.e., social validity) of ABA?

3. What are practitioners' experiences with the concept of behavioral artistry, and what training are they provided?

4. Is the teaching interaction procedure effective for teaching interpersonal skills?

This literature review comes from various sources, including qualitative and quantitative studies, editorials from peer-reviewed journals, and historically relevant scholarship. Search terms included behavioral artistry, compassion, empathy, humanism, relationship, therapeutic alliance, collaboration, social validity, dissatisfaction, perceptions, training, and professional development. This literature review will be organized thematically into four sections. First, the review will explore the controversy around ABA and calls for neurodiversity affirming care. Second, the review will investigate the concept of behavioral artistry and compassion as a related construct. This section will examine the unique characteristics of a behavioral artist and scholarship regarding

the prevalence of the corresponding personality traits amongst pre-service practitioners of ABA. The second section will review social validity in ABA, including how it is measured, the prevalence of social validity measures in ABA, and scholarly recommendations for assessing social validity from the child's perspective. This section will review articles about dissatisfaction and families and clients discontinuing services. Finally, outcomes literature and scholarship studying BCBA preparation training experiences in compassionate care will be reviewed.

2.1.1 Problem Statement and Purpose of Review

Applied behavior analysis (ABA) has been a leading intervention for Autism and other developmental disabilities since the 1970s. ABA grew out of theories of behaviorism in the 1900s, with Dr. John Watson and Dr. B. F. Skinner paving the way. Dr. Skinner pioneered theories of learning and described how events shape behavior. In the 1970s, Dr. Ivar Lovaas applied this learning to develop a program to teach language to young Autistic children, Early Intensive Behavioral Intervention (EIBI). This programming required an average of 40 hours per week of intensive intervention. Literature on the effectiveness of EIBI from Dr. Lovaas (and the scholarship following) states that "a certain percentage can become indistinguishable from their peers" (Leaf et al., 2015). At its inception, practitioners of EIBI under Dr. Lovaas were scientific, innovative, and nimble. Scholars of ABA have quoted Dr. Lovaas as saying, "If a child cannot learn in the way we teach, we teach in the way the child can learn." From this program, the foundation of ABA was born.

2.1.2 Controversy and Effectiveness of ABA

The effectiveness of ABA has been established through scientifically validated principles and techniques. As of 2007, over 1,000 peer-reviewed articles had been published detailing the effectiveness of ABA (Foxx, 2008). ABA is often utilized in Autism services and has long been considered a 'treatment.' Beginning in the 1960s, the National Institute of Mental Health began funding ABA Autism research, leading to the established literature base. ABA's effectiveness in autism extends to language acquisition, teaching play and leisure skills, functional life skills, academic skills such as reading and math, and decreasing dangerous behaviors that impact the quality of life. Behavior analytic methods with Autistic children seek to teach socially and educationally valuable repertoires through carefully programmed interventions (Foxx, 2008). These methods often include positive reinforcement, shaping (reinforcing behavior that approaches the goal), fading (gradually decreasing support), and prompting (providing a cue or additional stimuli to support the child to begin the behavior). Behavior analysts plan for skills to be maintained after the intervention is finished and generalization to other environments to ensure the intervention extends beyond the table. Careful data collection and analysis are part of the science of ABA, and repetition is typically part of ABA until data indicate mastery (Foxx, 2008).

While ABA is evidence-based and commonly implemented across the United States and beyond, it is mired in controversy. In a 2020 survey of Autistic adults and caregivers, 46% of Autistics exposed to ABA earlier in life met the criteria for severe post-traumatic stress symptoms compared to 28% of participants not exposed to ABA (Kupferstein, 2020). The authors identified participants (n=460) from the Interactive Autism Network, a national partnership with the Kennedy Krieger Institute linking the Autistic community to researchers. The study did not report the demographic data of participants. Autistics exposed to no intervention had the lowest incidence

of post-traumatic stress symptoms, 17%. An assessment of optional comments indicated that Autistic adults and their caregivers who persisted through ABA as children were more likely to adopt pathologized language, such as defining their behaviors or deficits. Conversely, those who did not receive ABA services were more likely to use words that accept their differences (i.e., neurodiversity affirming) or words related to self-esteem. The author did not include examples of the comments. This correlational study provides helpful qualitative feedback from Autistic adults and caregivers regarding their experience with ABA. However, methodological errors exist that warrant caution in the study's interpretation. Primarily, the study aims to investigate the reasons for selecting interventions other than ABA. The survey tool selected is a screening tool for post-traumatic stress disorder, which pre-determines trauma as the only reason for discontinuing. Respondents who identified low levels of post-traumatic stress symptoms may have discontinued ABA for other reasons not identified through the selected methods, thereby not meeting the aim of the study. There is a biased slant in the methodology selection and interpretation. Furthermore, since demographic data was not reported or analyzed, trends regarding cultural, gender, geographic, or age differences cannot be assessed. There may be differences in experiences across subgroups. Researchers should not view autism should not view as a monolith, and intersectionality in Autism and disability, in general, is beginning to be increasingly researched (Mallipeddi and VanDaalen, 2021). Nonetheless, Autistic adults did provide comments that the author evaluated qualitatively. While thorough details of these comments were not included in the paper Kupferstein (2020) identified a difference in qualitative experience between adults who had persisted in ABA and adults who discontinued services.

ABA has long been considered and marketed as a 'treatment' for autism, beginning with Dr. Lovaas' EIBI intervention stating children had "recovered" from autism (Leaf et al., 2021).

Insurance companies reimburse services, and medical providers commonly recommend the service. Autism has traditionally been conceptualized within the medical model of disability. From its initial description in the 1940s, this model of disability centers on a dichotomy between disabled and non-disabled. As such, the disabled receive 'treatment' to achieve socially acceptable levels of social, intellectual, and behavioral functioning. This dichotomy undergirds the controversy and calls to ban ABA. An editorial review by Shyman (2016) details the power differential between client and therapist in the medical model as one reason for controversy in ABA. In behavioral contingency (behavior-reinforcement), the child must engage in the desired behavior before receiving a reinforcer. The therapist ultimately maintains power, determining when the goal has been achieved.

Additionally, practitioners of ABA infrequently obtain assent or consent from the child prior to initiating behavioral interventions (Shyman, 2016). The clinical team (including behavior analyst, teacher, and family) determines the child's behaviors they wish to change and which interventions they will use. However, some idiosyncratic behaviors that an Autistic person may engage in serve adaptive purposes and should be subject to change only under extreme caution. For example, self-stimulatory behavior, such as hand flapping and rocking, has been said to be regulating by Autistic self-advocates, and attempts to decrease it can be harmful. While skill development and the reduction of harmful behaviors may be perceived as the child's best interest and support the family's goals, a non-speaking child does not get input in their own therapy, whereas a speaking child might.

Shyman (2016) outlines the roots of ABA in the medical model of disability and argues that ABA perpetuates and reinforces ableism. Shyman argues that the philosophical underpinnings of behaviorism and humanism are mutually exclusive and at odds with each other. However, the

argument presents a one-sided and coarse view of ABA. Many methodologies in ABA stress the importance of individual values, dignity, and self-determination. For example, acceptance and commitment therapy (ACT) is based on relational frame theory, a behavior-analytic intervention. ACT aims to help individuals identify goals through value identification and promote meaningful achievement by recontextualizing and accepting private events (i.e., thoughts, sensations, memories) that they have been avoiding. Therapists assist clients in gaining clarity about personal values and commit to behavior change to achieve value-oriented goals. The argument presented by Shyman (2016) discusses the interaction of ABA and ableism and the need to shift away from the medical model of disability and should be interpreted as such. However, Foxx's 1985 concept of behavioral artistry represents humanistic traits such as warmth, perceptual sensitivity, and humor. Foxx's call for behavioral artistry in ABA indicates that humanism and behaviorism are not mutually exclusive.

2.1.3 Neurodiversity Affirming ABA

Autistic individuals and their allies have expressed concerns about applied behavior analysis, many of which are rooted in ableism and the medical model of disability. With these concerns and authentic lived experiences, there is an increasing acknowledgement of the need to humbly listen and revisit practices that cause harm. Allen et al., (2024) reviewed historical and current perspectives on disability rights and the neurodiversity movement. The authors note that behavior analysts often provide services to Autistic and Neurodivergent individuals without any formal training in neurodiversity or disability rights or justice. Prior to 2022, the BACB ethical code only mentioned dignity and respect with regard to research and made no mention of social validity.

Allen et al. (2024) describe how implicit bias may lead to contributes to ableism. Implicit bias refers to the condition when one's "private behaviors (e.g., a diagnostician saying to themselves, 'I diagnose all children equitably') are inconsistent with their overt behavior (e.g., diagnosing Black children with ASD at a later age or after more follow up visits, than white children." (Allen et al. 2024). Authors provided examples of ableism in ABA including considering a vocal response of "no" to be 'noncompliance' for an Autistic person and considering the same vocal response to be self-advocacy for the neuromajority person. Similarly, another example of ableism in ABA involves setting goals to decrease hand-flapping behavior in Autistic children, yet considering foot-tapping behavior in neuromajority individuals as innocuous.

Neurodiversity affirming care has been defined in behavior analytic literature as ensuring access to reinforcers and resources at similar rates to the neuromajority. In affirming care, behavior analysts must minimize coercive contingencies and support and advocate for the individuals' authentic verbal behavior. Allen et al., (2024) provide recommendations, or 'calls to action' for behavior analysis to reform the practice toward neurodiversity affirming care. First, identity first language emphasizes autism as an identity. Identify-first language has been shown to be preferred by over 80% of Autistic individuals, Taboas et al., (2023). Similarly, neurodiversity affirming care requires practitioners to abandon functioning labels. Labels such as 'high-functioning' may communicate that the individual does not need necessary supports and services, while 'low-functioning' fails to convey the unique strengths of the individual. These functioning labels are not used in reference to the neuromajority and are ableist. Behavior analysts possess the tools to conduct systematic assessments of skills and the expertise to communicate client needs effectively. Functioning labels are unnecessary for supporting to clients. Finally, neurodiversity affirming care prioritizes self-determination, choice and assent. Behavior analysts can promote

dignity through fostering meaningful choice. Behavior analysis is uniquely suited to help individuals develop effective repertoires to promote self-determination and authentic informed assent.

2.1.4 Components of Behavioral Artistry

While ABA has been established to be effective with strong empirical support, the characteristics of an effective behavior analyst and practitioner promote humanism and the social validity of the science. The lack of these traits may undermine the practice and lead to adverse outcomes and perceptions. In 1996, Richard Foxx discussed the perception of the field and provided recommendations for disseminating behavior analysis to those served. Foxx recommended that behavior analysts begin to exert 'referent influence' instead of 'expert influence' (Foxx, 1996). The behavior analyst builds a partnership with the client and crafts programming upon shared values, beliefs, and attitudes. To do this, clients and caregivers build relationships with those they find likable and personable. The behavior analyst should establish setting conditions to build positive client relationships (Foxx, 1996).

In a 1985 article discussing the ethical and clinical issues with decreasing severe problem behavior, Foxx coined the term 'behavioral artistry.' Foxx asserted that behavioral artistry is necessary to treat problem behavior, and behavioral artists are more successful than behavioral technologists (Foxx 1985). Foxx elaborated on this concept in 1996 when he wrote that treating severe problem behavior "is like a pad de deux in ballet." Behavior artists "behave in response to 6 the client's behavior." In this behavioral dance, "the client always leads" (Foxx, 1996, p. 226). Behavioral artists possess the perceptual sensitivity necessary to shift their behavior in response to the clients, letting the client lead. Each individual person presents a unique set of strengths and

challenges when treating severe problem behavior. The behavioral artist sees the uniqueness and individuality of each case and applies the model as such. Conversely, a behavioral technologist applies strategies, methods, and procedures in a rote fashion. Foxx wrote, "The behavioral technologist is like a cook following a recipe, whereas the behavioral artist is a chef developing novel culinary concoctions. Apparently, too many cooks can spoil the broth" (Foxx 1996).

Leaf et al. (2021) expanded on this concept and examined factors associated with high-quality ABA. Behavior analysts achieve more rapid behavior change when following the intent of a protocol instead of following the recipe. They more readily consider critical factors such as current motivation, responsiveness, and signals of emotional state and adjust their intervention accordingly. For example, Dr. Lovaas established discrete trial teaching (DTT) in the 1970s as part of EIBI. During that time, the intervention was nimble and science-driven instead of protocol-driven. However, as ABA grew rapidly, discrete trial became increasingly protocol-driven because it was easy to teach to new staff. In DTT, the instructor should make decisions trial-by-trial based on data and use skilled and flexible prompting, fading, and shaping procedures. A behavioral artist is skilled in making procedural variations based on behavior and progress observed in the moment. If implemented by a behavioral technologist, discrete trial may be implemented with rigidity, use incorrect prompting and fading strategies, and lead to aversive conditions for the student.

In a multi-factored 2019 study, Callahan et al. established the 16PF assessment to assess similar personality traits to behavioral artistry. A national sample of parents of Autistic children (n=86) selected preferred descriptions of practitioners based on the 16PF characteristics. These characteristics included likes people, being thick-skinned, being self-actualized, having perceptual sensitivity, and does not like to fail. The mean percentage for parent preference for the personality traits associated with behavioral artistry was 86%. This indicates a strong preference for

descriptions of therapists who possess these interpersonal qualities. Students from a university in the Southwestern United States majoring in behavior analysis and students from other human service majors rated themselves on the 16PF. The authors selected participants from a university in the Southwestern United States. They were 53% female and 47% male; 48% Caucasian, 22% Hispanic, 14% African-American, 7% Asian/Pacific Islanders, 2% Native American, and 1% identified as "other," and the remaining participants choosing not to disclose (n=212). All participants were Registered Behavior Technicians (credentialed professionals who practice under a BCBA). Compared to other majors, ABA majors scored lower on factors of warmth and perfectionism than other those from other fields. Warmth aligns with the BA characteristic of 'likes people,' and perfectionism aligns with 'does not like to fail' with a p-value of 0.000 for warmth and 0.031 for perfectionism. Finally, Registered Behavior Technicians from self-rated high-BA and low-BA groups were observed implementing ABA therapy sessions. Sessions were scored by data collectors blind to the BA category and rated on operational definitions of pleasant facial expression, upbeat tone of voice, sustained gaze, and body proximity and orientation. Therapists in the high BA group were rated higher than the low BA group on pleasant facial expressions with a statistical difference of 0.040 during all sessions combined and 0.008 during discrete trial sessions. Therapists from the high-BA groups engaged in more sessions that included naturalistic environment teaching. They displayed more pleasant facial expressions during their discrete trial teaching (Callahan, 2019). This study represents the most comprehensive study of the concept of behavioral artistry available through this review of the literature. Callahan et al. (2019) sought to answer the question posed by Foxx, beginning in 1985, "what are the behaviors that make some behavior analysts better than others?" Behavioral artistry was examined from parent perception, differences amongst students across university majors, and demonstration of traits during therapy

sessions. While findings represented statistical differences, they are preliminary. Additional replications with significant findings are needed to support the claims regarding the importance of behavioral artistry.

2.1.5 Social Validity within ABA

Social validity is a central tenant of applied behavior analysis. ABA aims to improve the human condition by supporting the improvement of socially significant behaviors. Social validity refers to the extent to which clients believe services are making a positive impact. Kazdin (1977) and Wolf (1978), founders of modern-day ABA, described the importance of social validity. However, given ABA's analytical and objective nature, social validity remains under-measured in literature and practice. Wolf detailed three critical components of social validity: significance of the goals (i.e., are the goals what the client wants); appropriateness of the procedure (i.e., does the client consider the treatment procedures to be acceptable); and social importance of the effects (i.e., is the client satisfied with the results, including unexpected ones).

Social validation plays a significant role in adopting and implementing evidence-based practices (Callahan, 2016). Practitioners must consider social validity to support meaningful outcomes. Social validity is commonly measured through indirect measures such as rating scales and questionnaires such as the Treatment Evaluation Inventory (TEI) and the Children's Intervention Rating Profile (CIRP). These tools are empirically validated measures to assess treatment acceptability and survey caregivers or teachers most often. However, some researchers have argued for and described direct measures of social validity involving the recipient of behavior change services (Hanley, 2010). In these procedures, known as concurrent-chains schedules, the therapist repeatedly engages the child in different behavior change procedures, including a control,

each with a distinct visual cue such as a color-coded card or bright t-shirt. Corresponding colored cards are then made available outside the room where the child experienced that condition, and he or she may exchange that card with the adult to enter any of the rooms. The therapist repeats the procedure until the child consistently chooses one room. The process of experiencing the behavior change procedures and self-selecting to enter or not enter is empowering to the child. It allows the therapist to determine which intervention may be socially valid. Direct methods of measuring social validity establish acceptability effectively with non-speaking persons or who otherwise may not provide a vocal response.

Preference for high levels of behavioral artistry demonstrates social validity as the procedures are rated more favorably and lead to improved outcomes. Evidence indicates traits associated with behavioral artistry and compassion are rated more positively, and caregivers prefer characteristics of compassion. Compassionate care may enhance the social validity of ABA services and warrants further investigation. According to Taylor et al. (2019), "Both the centrality of compassion and empathy toward all lived experiences and the challenge of approaching compassion empirically and experimentally can, and should, compel our attention and inspire our best work." A compassionate practitioner demonstrates empathy and perspective-taking and shifts their behavior to alleviate another person's concerns, distress, or pain. This skill requires the therapist to respond to discriminative cues of a private event, such as the client or caregiver's emotional state. A series of coordinated relations allow the therapist to relate experiences in their past to what the client or caregiver is experiencing, for example, "If I were you, I would be experiencing…." This interaction has been considered relational competency and is the foundation of compassionate care (Taylor et al., 2019).

A study of parents of children receiving ABA services by Taylor et al. (2019) assessed parents' perception of relational characteristics. The authors identified participants through email lists, Facebook groups, and Autism advocacy groups of parents engaging in ABA services. The geographic location is unspecified, and demographic information is not reported. The areas of listening and collaboration, empathy and compassion, and behaviors that contribute to problems in the therapeutic relationship were surveyed. Respondents rated behavior analysts high in listening and collaboration on listening to concerns during the first meeting and protecting confidentiality. Behavior analysts were rated low on compromising during a disagreement, inquiring about satisfaction, and role clarification.

Regarding empathy and compassion, only six of 21 items were rated four or above using a Likert scale of one to five, with five being the highest rating. Caring about celebrating and appreciating progress and strengths each had a mean above 4.2. All other items were areas needing improvement. The lowest scores were caring for the entire family, acknowledging mistakes, and being patient. Finally, regarding negative behaviors that could affect the relationship, four of 11 items had a mean above four. Those items were using technical jargon, interrupting, interfering with opinions about other disciplines, and distracting during meetings. The most problematic areas were behavior analysts having their own agenda, authoritarian demeanor, and underestimating the child's ability. Authors detail training curriculums provided at their clinical organizations used to teach skills of compassionate care, including:

I. Engaging in positive social interactions (examples include facial expressions, positive comments about the child, and demonstrating enthusiasm)

II. Demonstrating empathy and compassion: Examples include making eye contact, asking open-ended questions, paraphrasing back to the speaker to ensure understanding, offering actions to take to alleviate the parent's distress

III. Demonstrating collaboration: Examples include seeking parent ideas, asking if treatment recommendations are acceptable, models flexibility, apologizing when appropriate, and identifying/adjusting goals based on family culture, religion, and lifestyle

Taylor et al. (2019) present a compelling argument for behavior analysis to improve compassionate care skills. The authors identified critical relational skills that are important to parents. At the same time, the sample size was small (n=95) and represented a small portion of the population of parents accessing services for their children. It is unclear if these results are representative of the population and if results would vary across demographics. This scholarship needs future replications and extensions to identify further the critical components of compassionate care and the corresponding skills. Taylor et al. present training curriculums utilized in private practice that may serve as a basis for the study of teaching these skills and enhancing outcomes. However, the aim of the study and the corresponding curriculums focus on parent perception and relationships with parents. It will be important moving forward to extend these findings to the individuals at the center of behavior change services. Adults who have discontinued services reported that ABA caused trauma and reported significant dissatisfaction with services (Kupferstein, 2020). Future scholarship should attempt to evaluate the perception of compassionate care amongst Autistic children and adults and develop operational definitions of compassionate care as it relates to interactions with the child/herself.

Foxx (1985 & 1996) and Leaf et al. (2015) established characteristics of behavior analysts that are necessary for positive outcomes and social validity. However, behavior analysts often receive little training in building therapeutic relationships. The requirements for the behavior analytic credentials include academic coursework and supervised fieldwork, which is 1,500-2,000 hours of practical experience supervised by a qualified BCBA. Many future BCBAs receive no formal training in therapeutic relationships during academic coursework. Out of 225 surveyed BCBAs, Leblanc et al. (2020) found that 72% reported no in-class lectures related to the topic, and 78% reported no assigned readings. The authors identified participants through the Colorado Association for applied behavior analysis and social media sites. They were predominately female (81%), and 47% were between the ages of 31 and 50. The authors did not report race and ethnicity demographics. During supervised fieldwork, 82% reported having no formal training. Trainees are more likely to receive formal training in other disciplines, such as psychology, counseling, or social work. Formal training occurred for 100% of survey respondents who received training in another field (LeBlanc et al., 2020). A review of LeBlanc (2020) indicates that BCBAs receive little formal training in building caregiver relationships. The sample size of this study was 221, a small fraction of the 55,000 in-service BCBAs. The authors included demographic information in the survey and questioned the years the respondent had held the credential and the primary work setting. However, data were not analyzed or reported relative to these demographics. Of the 221 respondents, 30% have held their credentials for 6-10 years, and 23% for over ten years. It may be possible that university curriculums are beginning to include this topic and that BCBAs who have been in the field fewer years may have had formal training. In contrast, BCBA's who graduated ten or more years ago did not. Nonetheless, LeBlanc et al. (2020) established that BCBAs value

these skills but receive little training in them. Additional empirical research is needed to evaluate training curriculums, assess their impact, and establish social validity.

2.1.6 Teaching Interaction Procedure

The teaching interaction procedure (TIP) is an evidence-based methodology widely used to teach social skills. While many studies have demonstrated the efficacy of TIP to teach a variety of skills to Autistic children, fewer studies have used TIP to teach staff skills. However, methodologically, it is reasonable that this procedure can effectively teach adults skills. TIP consists of the following steps: labeling the targeted skill, providing a rationale for learning the skill, describing the steps of the skill, modeling the skill, and providing feedback. Most applications of the teaching interaction procedure include modeling both examples and non-examples as well as role play. Green et al. (2020) demonstrated an application of TIP for training staff to teach social skills to Autistic children. The training was provided via a PowerPoint in which the trainer defined the skill, provided a rationale, explained the steps, and demonstrated examples and non-examples of the procedure. Feedback was given during role-play scenarios. While training took an average of 4.7 hours, all participants demonstrated fluency in TIP following training. Two of the three children mastered the targeted skill.

Ferguson et al. (2020) also applied TIP to train interventionists to implement the Cool Not Cool procedure for teaching social skills. A multiple baseline design was used across three teacher-student dyads. The training lasted an average of 2 h 34 min over five sessions. Each interventionist demonstrated acquisition of the Cool Not Cool procedure and generalization to another social skill and another student. The instructor participants rated the TIP high on a questionnaire of social validity with an average rating of 4.9 on a one to five scale of strongly disagree to strongly agree.

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Questions on this measure included "My knowledge increased after this training" and "After this training, I feel comfortable implementing the procedure." The study did not evaluate long-term maintenance, generalization, or fidelity. Questions on this measure included "my knowledge increased after this training" and "after this training, I feel comfortable implementing the procedure". The study did not evaluate long-term maintenance, generalization, or fidelity.

2.2 Context Review

The school at the center of this problem of practice is an alternative school setting serving children in grades kindergarten through a transition to adulthood. Students receive their education in this school due to significant support needs (typically the need for intense behavior 17 support). An IEP team decided that it is the least restrictive environment in which learning can occur. Most of the 140 students in the program have autism, and most exhibit significant behavior challenges such as aggression toward others, property destruction, and self-injury. Classrooms are staffed with one teacher, three to four paraprofessionals, and a behavior interventionist who is a skilled, uncertified behavior professional. The school employs two BCBAs and four registered behavior technicians (RBTs) who operate under the certification of the BCBAs. This team of BCBAs and RBTs serves as a behavior support team to assess, develop, and coach positive behavior plans and evidence-based practices across the program.

Program-wide, there is an emphasis on evidence-based practices for teaching and behavior intervention. Teachers are supported and expected to implement core evidence-based practices in their classrooms and oversee the implementation by their support staff. However, as this literature review has discussed, these interventions alone may not be enough for positive outcomes. How

they are implemented, the quality of the interaction with students, and the in-the moment decision-making are essential factors to developing relationships with students, the social validity of our field and interventions, and potentially enhanced outcomes. Like any organization, a spectrum of staff personalities ranges from behavioral technologists to behavioral artists. Data do not currently exist on the presence of these traits amongst the staff nor their perception of the need for behavioral artistry. Some staff have informal conversations about the need for increased compassion, flexibility in approach, and promotion of self-determination. The lack of these qualities can be observed in the rote application of protocols, frequent need for consultative support to make in-the-moment decisions, poor relationships with students, burnout and turnover, emotional responses to behaviors, and behaviors that remain unchanged for years. Additionally, the school climate can be tenuous, with high turnover, stress, and a drift toward punishment-based interventions over the school year.

The need for increased behavioral flexibility is present in the program. If improved, staff would demonstrate empowerment to make effective decisions regarding when to implement or modify an evidence-based practice. Behavioral artists demonstrate an upbeat attitude and genuine positive regard for students. The climate in the building and staff morale may be affected by increased behavioral flexibility. Finally, it is possible (and worthy of future study) that severe problem behavior might be reduced and safety enhanced.

2.3 Conclusion

This literature review explored the concept of behavioral artistry, the training experiences of BCBAs, the possession of the traits amongst BCBAs, and the controversy related to ABA as a

foundation for the need for reform. From the review of existing scholarship, traits associated with behavioral artistry are socially valid amongst caregivers and BCBAs. The value of these skills has been established (Callahan et al., 2019). However, related compassionate and therapeutic relationship skills are infrequently taught to pre-service BCBAs (LeBlanc et al., 2019). Questions remain unanswered after reviewing the literature. Foremost, the social validity of behavioral artistry remains to be established by the recipients of behavior change interventions. Caregivers perceive the characteristics associated with behavioral artistry and compassion to be preferable to their opposites (Callahan et al., 2019). BCBAs value the skills associated with behavioral artistry (Taylor et al., 2018). However, an investigation of these traits' perception by Autistic students receiving ABA or adults who received ABA services has not been 19 conducted. Would the perception of or satisfaction with ABA be improved if qualities of behavioral artistry are enhanced?

BCBAs receive little training in compassionate care and therapeutic relationship building. It could be inferred that little training is provided on the skills related to behavioral artistry as well. Training curriculums have been created to teach BCBAs and related staff aspects of compassionate care. Given the value of behavioral artistry and the need for reform, can behavioral artistry be trained? To be trained, an assessment tool would need to be used to determine efficacy.

ABA remains controversial in our social landscape. Calls for the banning of the practice remain loud and increasing. While ABA is empirically validated, the social validity of the science is in question. Primarily, do the means justify the end? To this effect, the need for reform is critical. Behavioral artistry, or how ABA is implemented, should be part of this reform.

3.0 Theory of Improvement and Improvement Plan

Many students in the Social Communication Program at the ESC engage in dangerous and severe problem behavior (i.e., intense physical aggression, intense self-injury, running away from the school building without regard for safety) that has persisted, unchanged, for several years without successful intervention. Given this ongoing problem, the aim is: *by the end of the 2025-2026 school year, staff in the SCC program at the ESC will demonstrate a 10% decrease in dangerous and severe problem behavior as defined by the appropriate metric for the identified behavior (i.e., frequency, duration, or intensity).*

Focusing on a reduction in severe problem behavior is highly measurable. Each student receiving tier three support has individualized progress monitoring for behavior goals. These measures can be utilized to track the achievement of the aim. The goal of a 10% decrease is both ambitious and realistic. Students typically demonstrate behavioral improvement each year, given the structure and support of the Social Communication Program and improved functional skills. An overall goal of 10% would account for the behavioral improvement that would have occurred without the change idea. Students have a right to high-quality, evidence-based interventions to progress with their IEP goals. All the students have an IEP goal that addresses these behaviors. However, a lack of progress on these goals may constitute a denial of a Free and Appropriate Public Education. Addressing the reduction of severe problem behavior through increasing compassionate care directly supports equity and inclusion. (See Appendix A.2 for Theory of Improvement Diagram.)

3.1.1 Primary Drivers

Several primary and secondary drivers impact severe problem behavior in this place of practice. Primarily, ableism, compassionate care, communication support, and staff competency significantly impact the staff's ability to support students with significant behavior support needs. Compassion is the foundation for helping professions and applied behavior analysis is the primary approach to supporting students in the Social Communication Program.

3.1.1.1 Ableism and the Medical Model

Applied behavior analysis is rooted in the medical model of disability. At its inception, ABA reinforced disability as pathological or dysfunctional. However, ABA practitioners are uniquely situated to change the field and use the science to partner with people to achieve meaningful outcomes. Practitioners can recognize that society and contexts are disabling to people. Changing environments to maximize learning and development can sometimes take careful analysis and intervention. The science of ABA and ethical practitioners can enhance the social validity of the field and its outcomes by naming ableism in ABA and subscribing to a social model of disability.

Secondary Driver: Neurodiversity view of Autism

The term 'neurodiversity' refers to the idea that autism and other neurological differences are normal extensions of diversity. They are not to be cured but accepted and embraced as ways of being. Neurodiversity stems from the social model of disability and aims to increase the acceptance and inclusion of all people. The neurodiversity movement is primarily a social justice

movement and promotes identity-first language, i.e., the Autistic person instead of a person with autism.

3.1.1.2 Positive Behavior Support versus Compassionate Care

Many staff in the organization have received training and education in positive behavior support (PBS). However, there is an essential distinction between this and compassionate behavior support. Compassionate care requires the elimination of coercion and ensuring a partnership between practitioner and client. This is not necessarily true of PBS. Many reinforcement strategies are implemented coercively, with a child's favorite items withheld until he/she behaves in a specific way. The child does not have to assent or consent to physical contact, such as physical prompting.

Secondary Driver: Coercive reinforcement

It is common in this place of practice and special education for practitioners to implement isolated reinforcement contingencies. Using a token economy, a teacher asks a student, "what are you working for?". The student is assisted to pick one thing from a choice of 5-6 items. The child may only have one item briefly after completing a pre-determined amount of work. The item is withheld until it is 'earned.' Students are often upset by this contingency since they can only have one item, which is withheld at all other times. These items are often their favorite toys, activities, or foods they find exciting. An alternative to isolated contingencies is synthesized reinforcement. In this contingency, a child completes the same pre-determined amount of work but is then told, "Let's play!". During this time, they can choose the activities, toys, or engagement that is

exciting to them. Coercion and frustration are reduced or eliminated because the child has more control over their environment.

3.1.2 Change Ideas

Three primary change ideas emerged from the review of scholarship and context review. These include training in compassionate care, obtaining student assent, and the use of synthesized reinforcement. The three change ideas are explored below.

3.1.2.1 Training in Compassionate Care

Compassion is the foundation for helping professions. The program must be rooted in the core value of compassionate care. All staff must operate from a shared mission of seeking first to understand, empowering self-determination, and building rapport and trust. All other supports and interventions can only be established upon this foundation. While many staff have received training on positive behavior support aspects, this is not necessarily compassionate. Many elements of positive behavior support can be implemented in coercive ways.

3.1.2.2 Obtaining Student Assent

Assent is the concept of an agreement to participate in service and interventions. Children under 18 cannot formally provide consent to behavior analytic services, but they can provide assent. Assent promotes agency, student autonomy, and agreement to participate. Consent is vital in therapeutic services, but consent is typically obtained from parents or guardians. However, recipients of behavior change services under 18 are not legally required to consent to services. A lack of assent may lead to coercion, such as physical prompting despite obvious discomfort,

refusal to allow the learner to avoid distressing situations, or removal of favorite items or activities until the therapist's goal is met. Humans, including children, can say, "No, I do not want to." This skill is even more critical for students with disabilities and those with impacted communication who are vulnerable to exploitation. Practitioners should be in tune to assent withdrawal, such as emotional responding, moving away, or dropping to the ground.

Morris et al. (2021) reviewed the literature on assent and found little empirical research on the topic. However, they propose a model for gaining and evaluating assent when working with Autistic individuals. Training staff to obtain consent would be a measurable step toward shifting the power balance in the student-teacher relationship. Students may feel more empowered and less coerced when adults gain assent before initiating physical touch, ensure students agree to interventions and strategies and promote self-determination. This, in turn, may support the reduction of severe problem behavior.

3.1.2.3 Synthesized Reinforcement

It is commonplace in special education, ABA intervention, and this place of practice to use the phrase "what are you working for" under the principle of positive reinforcement. While all working adults work for something, our students may perceive this as coercive since the adult is demonstrating control over their favorite items and activities. In this model, called isolated reinforcement contingency, the student typically chooses one item from an array of options. The student 'earns' that item after completing a pre-determined amount of work. All attempts to access that item before the work is complete are denied. Students may resort to severe problem behavior to gain access to that item, which continues to be withheld until 'compliance is gained' and the student completes the work. In this model, the student resorts to dangerous behavior to

communicate a desire for something, and that communication attempt is ignored until he/she 'complies' with the adult's demands.

There is an alternative to this model that removes coercion and promotes relationships. Synthesized reinforcement combines many of a student's favorite items and switches from "what are you working for?" to "Let's play." In this model, it is understood that a child typically does not just want one toy train but a whole box of trains and a person to build a track with. While building trains, the child might want to listen to music or have a show playing in the background. He/she might want a snack during playtime. In an isolated reinforcement contingency, the child is typically told he/she can have one item for a short time, perhaps 5 minutes. In synthesized reinforcement, the contingency is open. In other words, the child can ask for items or activities that he/she wants at that moment, increasing the reinforcing value of the time. The duration would also be longer to allow the child more time to explore, play, engage with favorite people, and relieve stress from the school day.

Synthesized reinforcement may still require a level of work completion or participation in school activities. This could still be upsetting to the child when the playtime is withheld until work is complete. Two factors can mitigate this effect. First, when the duration of the reinforcing time is increased and the activities in the time are more reinforcing, there may be satiation. The child has been exposed to the reinforcing stimuli, losing some of the reinforcing quality. For example, if a student plays with his favorite toys and people multiple times a day, he/she may not engage in dangerous behavior to get them. In the program, one teacher is knowledgeable about synthesized reinforcement and willing to modify her classroom interventions. This change idea would be practical and is a reasonable opportunity to impact severe problem behavior.

3.1.3 Proposed Change Idea

Plan-Do-Study-Act (PDSA) is a framework of quality improvement driven by small tests of change. This cycle of careful decisions minimizes risk and maximizes implementation fidelity. After thoroughly understanding the problem's context and maintaining variables, the team plans their change action, determines assessment measures, and posits potential outcomes. Next, the action is implemented on a small scale, collecting data throughout the process. The team then studies their effect. After analyzing the data, the team determines if they will continue implementing, revising, or scaling up the change idea. Over time, multiple series of PDSA are conducted, each progressing the organization toward a larger goal.

Targeting an aspect of compassionate care is the most appropriate starting point. I implemented a professional development (PD) series for paraprofessionals to develop compassionate behavior support skills using the teaching interaction procedure (TIP). This learning community targeted compassionate, trauma-informed behavior support practices, including assent, building and repairing relationships, and how to compassionately establish and hold boundaries. The series consisted of five sessions, each followed by in-classroom coaching. The teaching interaction procedure was used to train the skills. This is described in more detail in Section 3.2.1 Professional Development Series Method.

The curriculum for the building and repairing therapeutic rapport sessions was informed by the compassionate care literature by Taylor & LeBlanc (Taylor et al. 2019). The assent module was informed by Morris et al., (2021). The initial series intended to include a module on synthesized reinforcement; however, a change was made to this module based on staff request. Prior to beginning the series, multiple conversations occurred over several weeks regarding how to set and hold boundaries when staff must say 'no' to a student in the case of a non-negotiable

(i.e., unsafe behavior or significant rule violations). This module was informed by Mace et al., (2011).

With this change idea, I aimed to answer the following primary research questions:

1. To what extent does the teaching interaction procedure improve paraprofessionals' compassionate behavior support skills?

2. Do the compassionate care skills of paraprofessionals impact the improvement of severe problem behavior?

This cycle of PDSAs aimed to design, analyze, and refine a model and materials for teaching compassionate behavior support to paraprofessionals. A secondary aim for this cycle was to evaluate the impact of severe problem behavior following paraprofessional skill development. Appendix A.3 outlines the learning objectives for each module. The first session introduced the concept of neurodiversity and did not include an in-classroom coaching component. During the remaining sessions, the topic was introduced in a 15 to 20 minute overview using a Prezi presentation. Following the introduction, I facilitated a discussion regarding the value of the skill and assisted the participants in determining a plan for how they will implement it. Following the small group session, I provided coaching using the teaching interaction procedure in the classroom. Modeling and feedback was delivered during the individual performance feedback session.

Intro session: Understanding Neurodiversity

Session 1: Building therapeutic relationships

Session 2: Repairing therapeutic relationships

Session 3: Obtaining assent and acknowledging withdrawal

Session 4: Setting Boundaries

Quantitative and qualitative measures, including student interviews and surveys, were utilized. Furthermore, staff behavior was observed and recorded to assess the impact with observation notes for qualitative data. Each skill area used a checklist or implementation that was used during each coaching session (Appendix A.4). The fidelity checklists are a task analysis that mirror the session learning objectives with a yes or no response for the accurate completion of the skill. Each step was marked as observed or not observed and feedback was provided for each discrete step of the overall skill. I used the Beliefs About Behavior Scale (Wright & Cook, 2012) to collect information on their attitudes and perspectives on student behavior.

Finally, data on severe problem behavior was monitored for progress. Paraprofessionals are typically assigned to support a classroom of five to six students, with some staff serving one-on-one. Two students in the high school classroom have individual behavior plans that have individual measures of student progress. No additional student behavior data was collected. I posited that significant changes may not be noticeable in the data within six weeks, although some improvement could be interpreted.

I predicted that there would be an improvement in paraprofessional confidence and an increase in accuracy in implementing these skills. I also predicted that there would be a modest but noticeable reduction in severe problem behavior, with these outcomes limited by time. Following the completion of this dissertation, the results of this PDSA and the subsequent recommendations will be shared to allow for discussions of revising or scaling up this program to impact more students and staff.

3.2 Methods and Measures

3.2.1 Professional Development Series Method

A five-session professional development series was provided across the fall and winter of the 2023-2024 school year. The series consisted of an introduction session, followed by sessions teaching the skills of building therapeutic relationships, repairing therapeutic relationships, obtaining assent, and setting boundaries. The teaching interaction procedure was used to train each of the component skills. The components of the teaching interaction procedure are represented in Table 2.

Table 2 Teaching Interaction Procedure Components

Teaching Interaction Procedure Component	Operational Definition
Step 1: Define the skill	Researcher names the skill and provides a clear definition.
Step 2: Provide a meaningful rationale	Researcher provides at least one reason the skill is socially valid.
Step 3: Task analysis	Researcher provides an ordered list of the overall skill.
Step 4: Model	Researcher demonstrates each step correctly and incorrectly.
Step 5: Role play	Researcher asks one dyad to practice the skill.
Step 6: Feedback	Researcher provides praise for accuracy or corrective feedback for inaccuracy.

During each session, the topic was introduced in a short presentation, which consisted of defining the skill, providing a meaningful rationale, and detailing the discrete steps of the task analysis. I modeled the skills correctly and incorrectly and specified why the incorrect skills were inaccurate. One dyad engaged in a role-play during each session. Because the sessions were only 30 minutes, there was insufficient time for each of the five participants to engage in role-play. For the two sessions with self-report, I requested that the participant with the lowest percent accuracy on the previous fidelity checklist engage in the role-play to support learning.

For repairing therapeutic rapport and setting boundaries sessions, I discussed with the group that there are not frequent opportunities to use this skill, particularly if other positive behavior support strategies are used with fidelity. Therefore, these skills were measured by self-report. The participants used the same fidelity checklist but rated their behavior following an opportunity to use those skills. Following building therapeutic rapport and gaining assent sessions, I observed staff working with a student in their classroom. The fidelity checklists for those sessions are direct observation.

3.2.2 Outcome Measures

The aim of this problem of practice is: By the end of the 2025-2026 school year, students in the SCC program at ESC receiving tier 3 behavior support will demonstrate a 10% decrease in dangerous and severe problem behavior as defined by the appropriate metric for the identified behavior (i.e., frequency, duration, or intensity).

There are a variety of individual student measures utilized in the program. The type of measurement used to monitor progress is indicated by the type of behavior and the classroom context. For example, the team might track the frequency of a student who runs out of the

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building a few times a week. On the other hand, self-injury (e.g., hitting a head on the floor) might occur many times a day. In this case, interval data might be more appropriate since the actual frequency would be too high to count accurately.

Nonetheless, each student receiving tier 3 behavior support has an individualized method of data collection that can be quantified. Restraint, seclusion, and transport (RST) data is collected program wide, and every incident of RST is documented. RST data measures the behavioral response that staff use to respond to student behavior. Staff are trained to engage in RST only as a 'last resort' and solely when there is an imminent risk of significant harm. Nonetheless, based on observations, anecdotal evidence, and reports from staff, it appears that RST might be utilized in scenarios that don't strictly involve immediate danger.

Additionally, some students with needs contraindicate physical management procedures. Those students do engage in behavior substantiating actual imminent harm but RST is not used. Therefore, RST data is not an accurate measure of student behavior. Instead, it measures the methods staff choose to use to respond to student behavior. A decrease in physical management procedures may be correlated with an increase in positive methods or more compassionate responding. RST data for the two students with individual behavior plans was analyzed and used as an outcome measure. The aim will be considered met when individual measures of behavior and incidents of RST have improved by 10%. This would suggest that staff are selecting other methods for responding to student behavior.

3.2.3 Driver Measures

The primary driver addressed through this dissertation in practice is the compassionate care skills of practitioners. Compassion is the foundation upon which ABA is formed and must

be established as a prerequisite to any other intervention. Secondary drivers include professional development on compassionate care, trauma-informed ABA, skills-based treatment, and synthesized reinforcement.

With compassionate care being the focus, a measure was needed to assess pre-existing levels of this construct. The Beliefs About Behavior Survey (Browning-Wright and Cook, 2012) is a psychological assessment tool used to measure an individual's beliefs about the causes of behavior. The survey consists of 30 items designed to evaluate beliefs regarding the determinants of behavior and factors such as attitudes, subjective norms, perceived control, and behavioral intentions. Respondents rate their level of agreement or disagreement with each item, which provides insight into their beliefs and attitudes toward student behavior. Example questions include "If the student is not succeeding, lack of motivation or laziness is likely to be the problem" and "For students who do not behave well in my class, punitive discipline is effective at changing their behavior (e.g., reprimand, office referral, detention or suspension)."

Compassionate care requires practitioners to take a "circumstances view" of student behavior (Friman, 2021). Adopting this approach, the practitioner attributes interfering behavior to circumstances over the individual's lifespan instead of a problem within the person. Functional views of behavior (i.e., merely looking at what the person is attempting to escape or obtain) may lead to blaming the individual for the problem and often failing to view the behavior in light of learning history, life events, and social context. Practitioners who can view the whole child may respond more compassionately (Friman, 2021). The questions in the Beliefs about Behavior Scale, in part, measure the belief that behavior occurs for reasons outside the child's locus of control and that positive measures are more appropriate than consequences.

The Compassion Scale (CS) is an assessment tool derived from Dr. Kristen Neff's Self-Compassion Scale (Pommier & Tóth-Király, 2020). The scale measures positive and negative aspects of kindness, common humanity, and mindfulness. Respondents rate their agreement with each item on a scale, and their scores are used to determine their overall level of compassion. The Compassion Scale has been used in research and clinical settings to assess the relationship between compassion and other outcomes, such as well-being, resilience, and relationships. It provides insight into an individual's attitudes toward others. The CS does not have clinical norms or scores to indicate that an individual has a high or low level of compassion. Instead, scores are used comparatively to examine outcomes for those who score higher or lower on levels of compassion. It is important to note that the CS evaluates only compassion, which is the motivation to alleviate suffering, not the subsequent altruistic behavior itself. Additionally, there is a risk of social desirability bias that could influence responses. Many people wish to perceive themselves positively and may rate themselves higher on this scale. The Beliefs about Behavior Scale and The Compassion Scale were administered before the professional development series began.

The use of compassionate care skills was measured through checklists completed during observation. Already existing within the system, a fidelity checklist outlines each step of an intervention plan. The behavior support team uses these tools to promote protocol adherence and identify barriers to consistent implementation. After initiating a behavior intervention plan, a checklist is created with each discrete step. The behavior support team reviews the checklist with classroom/student teams and periodically observes staff implementing the plan. Not intended to be punitive, the fidelity check observation is an opportunity to identify a decrease in fidelity early and support teams through additional training, coaching, or problem-solving. It is critical to

understand the degree to which interventions were implemented. Typically, this tool includes practical steps such as staff following through using a visual schedule, timers, or frontloading changes. However, this tool was modified to include skills such as quality of interactions, reflective listening, avoiding coercion or gaining assent. (See Appendix E for example).

3.2.4 Process Measures

Social validity is an important construct in any intervention. While social validity has often been measured by parents and caregivers, a direct measure from the student would be valuable. Spear et al. (2013) reviewed social validity measures from 22 studies spanning 2011 to 2013. These measures were compared to the characteristic of social validity described in Wolf (1978), which include eight constructs including socially meaningful, society's goals, the magnitude of the change, practical and cost-effective, resources needed, maintenance of the change over time, acceptability, feasibility, and continued use. Student interviews were used to establish social validity of the goals of the intervention. Questions were created and derived from Spear et al. (2013) to assess social validity. (See Appendix F)

3.2.5 Participants

Five participants engaged in the study from the Social Communication Classroom Program. I identified two classrooms as amenable to shifting toward these strategies and met with the classroom teams to present the opportunity to participate. One classroom is a high school aged room with students ranging from 10th-12th grade. The other classroom is a transition age classroom that supports students between 12th grade and age 22. These classrooms were

selected because the intervention specialists in those rooms share similar beliefs about behavior and have engaged in many conversations with me about a shift toward these practices. I reviewed the professional development series, the timeline for completion, and the time requirement and informed them of their ability to opt-out at any time. I included a small stipend to complete the series as some of the time required after-school hours. (See Appendix A.5 for Participant Information Guide). Across the two classrooms, five staff agreed to participate. Four staff from the high school classroom joined and one staff from the transition classroom joined. In the transition classroom, the opportunity was presented to a total of 4 staff. Two female staff members in that room declined to participate, citing a lack of time to commit. One male staff member did not respond to the invitation or follow-up emails. The intervention specialist assigned to the classroom shared that this staff member has expressed disagreement with some practices in the school and was considering resigning. He resigned shortly after the study began.

After the first session, two participants resigned from the school. The sessions were paused for the month of December until those vacancies were filled and additional participants were recruited. At that time, the new hires were invited to join, to which they agreed. Therefore, three participants attended session one, and five participated in the remainder. While all the participants attended each session, not all follow-up observations could be conducted with each participant due to staff absences and scheduling conflicts. Participants were assigned a pseudonym in place of their names.

The participants have diverse professional backgrounds. Table 3 outlines participant's demographic and career background information. One of the participants is a former Registered Behavior Technician who was a clinical director of an ABA clinic. She has sought professional development on her own in ABA reform. Another participant was a clinical counselor in India

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and has received training in therapeutic rapport as a social worker. Alternatively, the remaining

three have no background in education, with one being a retired manger and one having done

case management. The participants were all Caucasian and ranged from 31 to 63 years old. Two

of the participants identified as male with the other three identifying as female.

Table 3 Participant Background Information

Participant Pseudonym	Age	Years in Education	Years with disabilities	Years at SCC	Knowledge of ABA	Professional Background
Susan	31	1-3 years	8-11 years	1.5 years	"moderately knowledgeable	former Registered Behavior Technician, RBT trainer, and ABA clinic manager
Samantha	38	4-7 years	1-3 years	2 years	"somewhat knowledgeable"	child care services
Paul	63	Less than 1 year	Less than 1 year	4 months	"not knowledgeable at all"	management
Josh	39	4-7 years	4-7 years	1 year	"moderately knowledgeable"	social work
Jenny	41	Less than 1 year	Less than 1 year	Less than 1 year	"moderately knowledgeable"	case manager

Sessions were held after school for 30 minutes. The sessions consisted of a short

presentation and a review of a checklist. Following the presentation, there was time for

discussion and questions. The presentation consisted of a brief description of the theory and

rationale for the practice, followed by a breakdown of the steps to the strategy. The first session

in the series introduced the topic of neurodiversity. This presentation was informed by Bottema

et al., (2021) and introduced concepts of identity-first language, harmful and supportive

terminology, self-determination and authentic choice.

Table 4 details the timeline in which the procedures occurred over the 2023-2024 school year. During the week following the sessions, I observed the participant in their classroom. A direct observation checklist was used for the Assent and Building Therapeutic Relationships modules to calculate the percentage of steps accurately completed by staff. For Repairing Therapeutic Relationships and Establishing Boundaries, a self-report checklist and interview were used due to the intermittent nature of when this strategy would need to be used. If a staff marked that a step was not completed, noted difficulty with a step, or observed a step incorrectly conducted, it was taken as an opportunity for learning. We talked about the step, barriers, and how it could be improved in the future.

Table 4 Procedural Timeline

Procedural Timeline	
Week of:	Study Activity
10/2/2023	Participant meeting and consent
10/9/2023	Student interviews
10/30/2023	Administered Compassion Scale and Beliefs about Behavior Survey
11/13/2023	Session 1: Introduction to Neurodiversity
11/27/2023	Session 2: Building Therapeutic Relationships
1/8/2024	Session 3: Rebuilding Therapeutic Relationships
1/15/2024	Session 4: Acknowledging Assent
1/22/2024	Session 5: Setting Boundaries
1/29/2024	Session 6: Connection Seeking vs. Attention Seeking
3/5/2024	Administered Feedback Surveys

3.2.6 Informed Consent

Before beginning the series, I reviewed its content and time requirements with potential participants. I informed participants that they could opt-out at any time and that this project is not affiliated with the ESC and is not a condition of their employment. They did not sign informed consent, rather their session attendance served as consent. Parents and legal guardians signed informed consent for student interviews (See Appendix A.6). One of the students interviewed is over 18 and does not have a legal guardian. However, her father was notified and gave consent via text message.

3.2.7 Student Interviews

Parental consent was sought from all students across the two classrooms. Two parents signed consent for the interview. One student is over 18 and does not have a legal guardian. She verbally consented. Her parents were informed and gave verbal consent. Before initiating the interview, the interviewer and intervention specialist explained the interview's purpose to the student using vocabulary accessible to each student's communication needs. The student was asked if they wanted to participate. Each of the three students verbally agreed. Students were interviewed in a separate office space one-on-one with the author. The author is a known and familiar staff to each student interviewed. Parents/legal guardians signed consent for their child to participate in the interview. Due to the diverse communication needs of the students, the interview was individualized. A picture of one of the staff members was placed on the table in front of the student. The interviewer asked five questions about that staff member. The questions included "My teacher understands me,"; "I like the way my teacher interacts with me,"; "My

teacher interacts with other students positively"; and "I would like to see a change in the way my

teacher interacts with me." Each question was rated "yes, no, or a little bit" for each staff

member. Clarifying questions were asked in addition to questions to extend the student's

response. (See Appendix A.7 for outline of student interview questions)

4.0 PDSA Results

4.1 Student Interviews

The interviewer attempted to gain consent for each student in the participants' classrooms to be interviewed. Three students returned consent forms. Pseudonyms are used in place of student names. The interviews also contain references to staff members not involved as participants. Those staff members are referred to as 'staff member 1', 'staff member 2', and so on. Participants Jenny and Paul joined the study after the student interviews were conducted and were not included in the questions. The interviewer asked the students to respond to the questions "My teacher understands me,"; "I like the way my teacher interacts with me,"; "My teacher interacts with other students positively," and "I would like to see a change in the way my teacher interacts with me." for each of the staff in their classroom. A picture of the staff member in question was placed in front of the student, and visual support indicating "yes, a little bit, no" with corresponding emoji faces (i.e., smiley face, neutral face, and frown face). The interviewer requested Aiden's intervention specialist to attend the interview to support his behavior needs due to escalation that occurred earlier that day.

4.1.1 Regina's Interview

Regina is assigned to the high school classroom with the participants Susan, Stephanie, Jenny and Paul. Samantha and Paul joined the study after student interviews were conducted and were not included in the questions. Regina spends her school day in a one-on-one self-contained

classroom setting. This is a separate classroom space with one student and one staff. No other students come into this room during the day. The classroom has a staff schedule for supporting Regina, rotating between intervention specialist and paraprofessionals. Susan, Jenny and Samantha work with Jenny. Although Paul is assigned to this classroom, he does not work with Regina due to her need for female staff.

The interviewer showed Regina a picture of her intervention specialist, Ms. Susan, and two staff members who have resigned since the study began. Regina provided a head nod for each staff member when provided the prompt, "I like the way my teacher interacts with me." When shown a picture of her intervention specialist, Regina smiled and said the teacher's name. The interviewer said, "Tell me about (staff member)." Regina replied, *"Saturdays,"* to which the interviewer probed, "What about Saturday?" Regina said, *"Visits."* (Note: Regina's intervention specialist does a home visit most Saturdays). During the interview, a staff member walked past the doorway, and Regina pointed at her. The interviewer asked, "Who is that?". Regina replied with the staff member's name. The interviewer replied, "Tell me about her". Regina said, "*Hugs.*"

4.1.2 Austin's Interview

Austin is in the high school classroom with the participants Susan, Stephanie, Jenny, and Paul. Stephanie and Paul joined the study after student interviews were conducted and were not included in the questions.

When asked about staff member 1, Austin responded, "*She understands me a little, I guess. I don't work with her very much.".* When asked about Ms. Susan, the student responded, **"***She understands me. We both like Pokemon. I have more connection with her. I don't think she always has time (to interact with me). She always has paperwork to do."*. The interviewer then

asked about staff member 2. Austin replied, *"Yes, but she doesn't have much video game knowledge. She's the one that helps the most. Sometimes, I don't like independent work. Some parts I don't want to do. It's writing. I wish they'd be more into video games. (long pause). There's one person I really don't like"*. Interviewer probed. Austin named a staff member that was previously his main teacher. This teacher now teaches one of Austin's classes each day. "*I don't know what's going on. My body just doesn't want help from her."* Austin began to scream and flip the table. The Interviewer changed the subject to someone who makes him happy. Austin responded and named two staff that he frequently interacts with. Interviewer probed for more information and Austin replied, *"They give me hugs."*

4.1.3 Aiden's Interview

Aiden attends the transition classroom and works with Josh for 1-2 hours each day. When questioned about staff members 1 and 2, Aiden responded, "*They are nice.*" When asked about Mr. Josh, Aiden said, *"No, it's difficult to explain. He was mean to me."* The student's intervention specialist was in the room during the interview for behavior support and provided context that Aiden did have a traumatic experience with a staff person who looks physically similar to Mr. Josh. From her observation, Mr. Josh is kind and patient with him. Aiden explained, "*I get frustrated when they are working with other students. I have to get their attention."* The interviewer solicited more information. Aiden responded, *"Well, you see..."* His conversation trailed off. He began to engage in head-banging and the interview was stopped.

4.1.4 Analysis of Student Interviews

Each of the participants, directly or indirectly spoke of the relationships they have with staff. While Regina used minimal vocal language in her interview, her comments referred to social relationships, i.e., "*visits*" and "*hugs.*" Austin and Aiden referenced time and attention, i.e., "*I have to get their attention*" and "*I don't think she always has time.*". Austin also spoke of interests of his (i.e., video games and Pokemon). He stated that he wished the staff had more shared interest and that he felt a connection to Susan partly because of her common interest in Pokemon.

Austin spontaneously offered additional information in his interview about a staff member with whom he does not have a positive relationship. When speaking of this person, he became visibly agitated and began to flip the table. Due to the escalation in potentially unsafe behavior, I did not continue to ask questions about this person. However, his affect and behavior immediately shifted when asked about someone who makes him feel happy. He mentioned two other staff members stated that he likes when they give him hugs.

Social validity is an important construct in ABA. Social validity encompasses the significance of the goals appropriateness of the procedure and social importance of the effects. The data collected from these interviews demonstrates the importance and relevance of the goals of the professional development series since each of the students cited the importance of relationships and time spent together. The first two sessions in the series were building and repairing therapeutic relationships and targeted the quality of staff-student interactions.

4.2 Field Notes

Field Notes are primarily used to create detailed descriptions of the study environment, encounters, interviews and documents of vital contextual data. These jottings documented information from the school environment (i.e., classrooms, teacher language, meetings) and were used to discover more about what influences compassionate behavior support. Table 5 details the anecdotal data that was collected throughout the school year as it pertains to shifts in the system toward compassionate care. Throughout the 2023-2024 school year, I noted an increase in talk about compassion and positive behavior support while implementing this project. This was such a marked change from the previous school year that the school adopted "compassion" as a core school value during this year. Table 4 details anecdotal data from the 2023-2024 school year while this Dissertation in Practice occurred.

Table 5 Field Note Anecdotal Data

1. Removed restraint/Safety Care from support plans
2. The administration requested training on compassionate boundaries.
3. The administration requested training on assent.
4. The administration requested training on connection-seeking behavior.
5. A total of 14 hallway conversations from September-February regarding responding compassionately
6. A total of 97 documented occurrences of 'compassion' in discussions with administrators from September-February
7. Observed 22 occurrences of staff gaining or attempting to gain assent before touching a student
8. Brought into 12 student situations in the moment to problem-solve more compassionate and safer ways to support a student
9. During 3 of 5 sessions, other staff asked if they could sit in and learn.

While there is no baseline for these data to serve as a comparison, this does, at least anecdotally, mark a shift in the system. Before this school year and the implementation of this project, there were few conversations about compassion and what that meant for our students and staff. This year, at least 97 documented times, building administrators mentioned compassion in conversation with students, and 14 times, staff stopped me in the hallway to discuss what it meant for their students.

The initial professional development series intended to have 5 sessions. However, throughout the planning phases of the project, conversations occurred in the program about a necessary mindset shift around attention-seeking behavior. The mental health and behavior teams and building administration noticed a persistent perspective that staff believe they must use planned ignoring for attention-seeking behavior and that extinction for this behavior was the default. The phrase 'connection-seeking' behavior was introduced to these teams. I authored a mini-session on shifting mindsets from attention-seeking to connection and added this to the professional development series. The shift from 'attention' to 'connection' is not a call to change the scientific function of the behavior but a semantic shift that prompts a deeper level of understanding. Primarily, labeling a behavior 'attention seeking' has taken ableist undertones. Many people would likely not refer to the behavior of their loved ones as 'attention-seeking' but have little difficulty referring to the challenging behavior of an autistic student as 'attention-seeking'.

Furthermore, when these phrases are used, it becomes easier to separate the human from the behavior and response less compassionately. Changing the semantics to 'connection' requires us to seek understanding. It is possible that, at some point, these connection-seeking behaviors may get reinforced with attention. However, extinction is difficult to maintain consistently, especially in a school setting without behaviorally trained staff. When extinction is implemented incorrectly, the risk is greater than planning for intermittently reinforcing behaviors low in the response class. Trump et al. (2020) describes effective differential reinforcement procedures without the use of extinction. They conducted a meta-analysis of 109 individual experiments. Their results indicate that behavior reduction can be achieved when a dense schedule of reinforcement is in place for alternative behavior, even when another, less dense, schedule of

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reinforcement is in place for the behavior to be reduced. Behavior analysts have a responsibility to provide the least restrictive intervention. Beginning with a DRA without extinction meets this criterion. This strategy must be a program-wide strategy, only implementing extinction under the recommendation and oversight of a BCBA.

While preparing materials for the sessions and gathering participants in the classroom, other staff questioned what we were doing. I mentioned we were doing a professional development series on compassionate care. In three of the five sessions, other staff asked if they could join. Administrators in the building knew the series was occurring and asked if I could present some of the training to a larger group. I presented the assent, boundaries, and connection-seeking versus attention-seeking training to a large group at their request. The connection-seeking training received a high level of staff involvement and engagement. Following that training, building administrators agreed to a collaborative training between myself and our mental health team to present the training to our full staff.

4.3 Driver Outcomes

4.3.1 Compassion Scale

Table 6 depicts the results of the Compassion Scale. Each of the five participants completed the scale in its entirety. The scale has 16 questions across four subscales related to aspects of kindness, common humanity, mindfulness, and indifference. Items are ranked on a five-point Likert scale of almost never to almost always. The highest possible score is 80. Subscale scores are calculated by computing the mean of the subscale item responses. The four

questions related to indifference are reverse-scored in order to calculate a total compassion core. The indifference subscale scores on Table 6 reversed. After reversing, higher scores on indifference indicate higher levels of compassion.

Table 6 Compassion Scale Results

	Susan	Samantha	Paul	Josh	Jenny
Kindness	16	15	12	16	11
Common Humanity	16	15	13	13	13
Mindfulness	16	14	13	15	11
Indifference	11	16	12	11	10
TOTAL	59	60	50	60	45

4.3.2 Beliefs About Behavior Scale

Table 7 includes responses from the Beliefs About Behavior Scale. All five participants responded to this survey at the beginning of the series. The scale has 30 belief statements that facilitate or interfere with adopting and implementing positive behavior support strategies. An example of a statement indicating a facilitative belief is, "Even without parental involvement and support, schools can effectively teach students' behavioral expectations and social skills." An example of a statement indicating an interfering belief is, "Motivational systems that provide extrinsic rewards harm intrinsic motivation." Respondents rate their agreement with the belief statement using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Items are given one point if they indicate a facilitative belief. Items are given zero points if they

indicate a interfering belief. The total possible score is 30. Table 6 reports the total scores across participants. Table 7 shows the items with the highest levels of agreement.

Table 7 Beliefs About Behavior Scale Total Scores

Beliefs About Behavior Scale Total Scores					
Participant	Susan	Samantha	Paul	Josh	Jenny
Total score (out of 30)	29	28	12	14	8

Table 8 Beliefs About Behavior Scale Facilitative Statements with Highest Agreement

Item Number	Facilitative Statement	% Agreement
10	Praise and positive recognition are powerful tools to get students to behave well in school.	100%
16	Students who do not respond well to basic classroom management should receive evidence-based interventions to address their behavior before evaluation for special education or more restrictive placement is considered.	100%
28	Just like we teach academics, schools should set aside tie to teach all students important social-emotional skills, such as managing one's emotions, demonstrating care and concern for others, and problem-solving interpersonal conflicts.	100%
30	The mission of a school should be to teach both academic and social emotional skills that lead to success in life.	100%
14	Students who lack social skills and/or the ability to manage their emotions, should be taught these skills in school.	80%
17	Even without parental involvement and support, school can effectively teach students' behavioral expectations and social skills.	80%
5	I can prevent most behavior problems by posting expectations, teaching those expectations, and rewarding student when they exhibit those expectations.	80%
6	How students behave in my class is primarily related to my classroom management strategies and the relationships I have with each student.	80%

Five items had 100% agreement, indicating all five respondents demonstrated a facilitative belief. Table 8 depicts the interfering statements from the BABS to which more than one respondent either agreed or strongly agreed. Jenny and John indicated some level of agreement with these statements. Paul also agreed with the statement, "Students should know how to behavior and be ready to learn – I should not have to teach these behaviors," marking a 60% agreement for this interfering belief.

The survey that Jenny submitted provided some interesting results. She reported agreement with 8 out of 30 supportive beliefs. Jenny agreed with the statements "Praise and positive recognition are powerful tools to get students to behave well in school" and "If I use effective behavior support strategies, I can get 80-90% of students to meet behavioral expectations and maintain engagement in learning." However, she also agreed with the statement "Motivational systems that provide external reward harm intrinsic motivation." and disagreed with "Proactive positive behavioral interventions produce longer lasting behavioral change than punishment based strategies," Jenny also demonstrated some interfering beliefs related to the role of parent involvement into behavior at school. Jenny agreed to a statement "the primary reason students misbehave is their lack of parent support". She disagree with "even without parental involvement and support, school can effectively teach students' behavioral expectations and social skills".

Table 9 Interfering beliefs from the BABS to which more than one respondent agreed or strongly agreed

Item number	Interfering Statement:	% Agreement
3	My students must respect me before I can show respect to them	40%
4	If the student isn't succeeding, lack of motivation or laziness is likely to be the problem.	40%
7	For students who don't behave well In my class, punitive discipline is effective at change their behavior (e.g., reprimand, office referral, detention, or suspension).	40%
8	Students should know how to behavior and be ready to learn-I should not have to teach these behaviors.	60%
9	If a student has repeated behavior problems, I should refer him/her to a team meeting to consider whether special education services are needed.	40%
12	Schools are responsible for teaching academics whereas parents and the students themselves are respondible for teaching and learning behaviors.	40%
13	It is unfair if some students receive individual incentives and rewards while others do not.	40%
15	Students should behave and study to learn the material. This is their responsibility, not mine.	40%
20	Proactive, positive behavioral interventions and strategies produce longer lasting behavioral change than punishment-based strategies.	40%
21	Only students with IEPs are entitled to function-based behavior plans.	40%
22	Students with emotional and behavior disabilities should be educated outside of general education classes.	40%
24	I do not have the time to implement interventions or behavior plans for students who engage in behavior problems.	40%
27	The primary reason student's misbehavior in school is their lack of parent support.	40%

4.3.3 Post-Module Skill Checklist Data

The skill checklists were analyzed following each module. Samantha and Paul began the series following the building relationship session. Therefore, they did not complete that training. John was not present at work for the rebuilding relationships session, and time did not permit a makeup session.

4.3.3.1 Susan

Table 10 Percent Accuracy on Post-Module Skill Checklist-Susan

	% Accuracy Building Therapeutic Relationships	% Accuracy Rebuilding Therapeutic Relationships	% Accuracy Assent	% Accuracy Setting Boundaries
Susan	100%	100%	100%	100%

Susan demonstrated 100% accuracy with all of the skills. Susan accurately performed each step of the skill checklists. During the Building Therapeutic Relationships session, Susan noted an area of growth. She commented:

> Just like thinking, and you know, talking about this made me think about it more, like be more aware. I've thought a lot about Henry. He's the one I've struggled with most. I've been trying to be more intentional about it and like, um, finding the things I know he likes. Like, he really likes to just be close to people. I know that's how he feels cared about. So, I've been making a point to just use proximity. I noticed that over like the past week; it seems like maybe he's more relaxed with me, and I'm able to get some more work out of him because we are just paired better.

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Following the Rebuilding Therapeutic Relationships session Susan reflected on a crisis with a student that ended positively, which she attributed to her relationship with him. Susan commented:

I feel like I'm seeing these relationships steadily improving. After the (name removed) incident, it was really easy to come back from that. I think it was because he felt respected and treated like an adult. He was right back to baseline. Nobody put hands on him, and we allowed him just space to de-escalate. I mean, it went just about as well as it could have because we respected his boundaries and talked to him as an adult. I think other people might have escalated the situation if they didn't have that relationship.

Susan was observed delivering a one-on-one reading lesson following the Assent session. Susan accurately defined assent, provided a rationale for gaining assent, and identified assent behaviors for her students. She also acknowledged when assent was withdrawn, modified her behavior to regain assent, and completed 100% of the steps accurately.

Following the Setting Boundaries session, Susan spoke of supporting a student during a transition between locations. The student indicated he did not want to go to the required location but Susan informed him that he must transition out of the classroom due to no staff being in the room to stay with him. Susan communicated that she checked-in with the intervention specialist prior to setting the boundary to ensure team agreement. Susan expressed that once she explained why he needed to transition, she found it most successful to wait for him to process the situation.

4.3.3.2 Samantha

Table 11 Percent Accuracy on Post-Module Skill Checklist-Samantha

	% Accuracy Building Therapeutic Relationships	% Accuracy Rebuilding Therapeutic Relationships	% Accuracy Assent	% Accuracy Setting Boundaries
Samantha	N/A	71%	88%	86%

Across the three sessions attended, Samantha demonstrated an average accuracy of 81.6%. Following the Rebuilding Therapeutic Relationship setting, Samantha commented that some students may be more challenging to build relationships with. She referenced one student in the classroom that she has been making an effort to improve her relationship with. She noted that, due to previous behavioral escalation, she has avoided interacting with him as much. Following this session, Samantha stated:

> I'm really trying to put my own personal thoughts aside and focus on the things we have in common. One of the biggest things I see is I need to intervene and get to it as soon as it starts going south or the relationship is way harder to fix if we let it go too far.

Samantha accurately completed the steps of noticing the breakdown and acknowledging harm. However, she did not accurately increase reinforcement and revisit preferences. Following the assent session, Samantha was observed transitioning with a student from work to break and back to work. Samantha accurately defined assent provided a rationale for gaining assent and identified assent behaviors for the student. Samantha did not accurately identify when assent was revoked in-the-moment. She identified the student's assent behavior as a positive facial tone, body oriented toward her, and following through with requests after the first request. Assent was considered not given or revoked when the

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student's facial expression changed, his body turned or moved away. When she gave an instruction more than one time, she presumed this to be a lack of assent based on her knowledge of the student. During the observation, Samantha was prompted to recognize that the student's facial expression had changed while transitioning to a break. After checking in with him, he requested a different break activity choice. At the end of the break, Samantha told the student that his break was finished. He ended the activity and sat in his desk.

During the follow-up interview from the Setting Boundaries session, Samantha noted she did not complete the step: "Hold the boundary: use reflective listening, be present, and wait." Upon discussion, she indicated that the rationale for not following this step was related to the classroom teacher's disagreement. The boundary was related to a school rule regarding technology. Setting a boundary is aimed at avoiding power struggles being present and allowing time for processing. Samantha reported that the teacher believed the student should comply so the lesson could continue sooner. Therefore, the "be present and wait" part of the step did not occur.

4.3.3.3 Paul

Table 12 Percent Accuracy on Post-Module Skill Checklist-Paul

	% Accuracy Building Therapeutic Relationships	% Accuracy Rebuilding Therapeutic Relationships	% Accuracy Assent	% Accuracy Setting Boundaries
Paul	N/A	86%	75%	100%

Following the Rebuilding Relationships session, Paul commented that some students may be more challenging to build relationships with. Paul referenced a student in the classroom with

whom he previously had trouble building a relationship. Paul observed that this student appears guarded and does not readily build relationships with teachers. Paul believed that shared interest led to the improvement in this relationship. Paul stated that he made an effort to show genuine interest in the activities that the student likes and that this has helped improve their conversations.

Paul was observed engaging in leisure skills work activity with a student following the assent session. Paul successfully defined assent, provided a rationale for gaining assent, and identified assent behaviors for their students. Paul did not recognize when assent was gained or revoked. Paul was observed supporting a student through a self-care task with which the student needs physical support. The student initially pulled his hand away and turned his body away. Paul paused and gave a vocal task analysis. The student then re-oriented toward Paul and they completed the task. Paul required prompting to recognize at which point assent was given and revoked.

4.3.3.4 Josh

Table 13 Percent Accuracy on Post-Module Skill Checklist-Josh

	% Accuracy Building Therapeutic Relationships	% Accuracy Rebuilding Therapeutic Relationships	% Accuracy Assent	% Accuracy Setting Boundaries
Josh	100%	N/A	100%	57%

Josh was observed supporting a student following the building therapeutic relationships session. He was walking with a student around the outside of the building. Josh accurately defined 'pairing' and identified a meaningful rationale. Josh described the student's interests as engaging in preferred routines. During the observation, the student stopped frequently to touch objects in

the hallway with his feet or hands and turned around to re-do various movements. Josh was observed to pause his own walking and followed the student's pace. The student asked for items in the environment. Josh acknowledged and gave the student the item (i.e.,, the treadmill key). Following the assent Josh was observed transitioning a student to the restroom. Josh accurately completed all steps. Josh asked for assent prior to touching the student and waited for a physical indication that assent was gained. While washing hands, Josh provided hand-over-hand prompting first, before other less intrusive prompts. The student pulled his hand away slightly. Josh self-corrected, and asked the student if he wanted help.

Josh reflected on setting boundaries with a student who frequently walks or runs out of the building. Step 3 of the strategy is to "ensure team agreement." He noted that part of the breakdown is that the team does not agree about whether the behavior is permissible. Some members of the students' team allow the students to run out of the building, making it hard for others to set a boundary. Josh indicated "no" on the self-report questionnaire because he did not have a team agreement and could not hold the boundary.

4.3.3.5 Jenny

Table 14 Percent Accuracy on Post-Module Skill Checklist-Jenny

	% Accuracy Building Therapeutic Relationships	% Accuracy Rebuilding Therapeutic Relationships	% Accuracy Assent	% Accuracy Setting Boundaries
Jenny	66%	57%	38%	43%

After therapeutic rapport: Notably, Jenny is new to the field of education and has recognized a need for growth in this area. She commented:

I asked the teachers for feedback about what I was doing. I learned to respond with empathy. Like, when he's saying he doesn't want to do something, I can reflect on his feelings and say it's okay to feel that way. He even gave me a hug this week for the first time. I'm seeing that he responds to me better and, like, chooses to come work with me more.

During the interview following the Rebuilding Relationships session, Jenny commented that she had intentionally practiced being more patient. She noted her perception that some students may take more patience. She asked how to balance times when redirection is necessary and when an answer of "no" must be given but in a way that does not erode the relationship, *"I'm still finding it hard to find times to redirect and still be kind. Like, how do I say 'no' and balance being kind and like firm at the same time?"*.

Assent Jenny was observed supporting a student with her hygiene routine. Jenny did not recognize when assent was gained. While Jenny did not provide an accurate definition of assent, she did identify accurate assent behaviors for her students and accurately explained why assent is important. While brushing teeth, the student needed assistance to squeeze a toothpaste bottle. Jenny began to use hand-over-hand prompting but immediately self-corrected, pulled her hand back, and asked the student if she could help. However, the student said "no," and Jenny persisted. The student pulled away and turned her back. Jenny prompted the student again and did not recognize the student's lack of assent. Jenny did not modify her own behavior in-the-moment to regain assent.

Following the Setting Boundaries session, Jenny recalled a situation with a student who attempted to run out of the school building. Jenny identified that she did not set up the environment to maintain safe boundaries. This student is supported in a classroom by herself and one

paraprofessional. Several environmental modifications to the space ensure that safety is maintained due to high-intensity behavior. Jenny recognized that she did not follow through on maintaining these modifications, making it difficult to hold the boundary. Furthermore, Jenny decided to make an adjustment to the daily schedule and plan for this student, without team agreement. This led to confusion for the student and staff when a boundary needed to be set. Finally, Jenny identified that she allowed the behavior to escalate too far behavior she intervened and did not set a boundary soon enough which allowed time and space for the student to attempt to run out of the building.

4.4 Final Feedback Surveys

Following the series' conclusion, I solicited participant feedback using a Microsoft Forms survey. This survey queried satisfaction with sessions, social acceptability of interventions, and short answer responses to describe the series' impact. Out of the five participants, four completed the final survey. Participants were allowed to submit the form anonymously to increase their comfort with respondent honestly. All four respondents selected this option.

Staff found the content of the sessions to be acceptable. They agreed that the strategies would benefit students and that most staff would find them acceptable. The survey questioned staff learning and key takeaways from the content. Figure 1 depicts respondent agreement with the acceptability of the strategies. When provided the prompt "I learned new information from this session," the respondents agreed that the assent module offered new content and learning. At least one respondent noted either disagreement or strong disagreement that the other modules provided new learning. Figure 2 depicts the degree to which respondents agree with the prompt

"I learned new information from this session." It should be noted that the setting boundaries

presentation was presented to another small group of staff in the building at the request of

building administrators, and two of the participants were present for that training. One of the

participants in the group was formerly employed as a social worker and may have prior

knowledge of therapeutic rapport.

The survey contained four short answer questions to allow participants an opportunity to

provide more specific feedback. The participants responded positively to the connection-seeking

module and frequently referenced it in their comments. Participants also referenced their use of

relationship-building strategies and noted perceived benefits. Table 15 outlines the qualitative

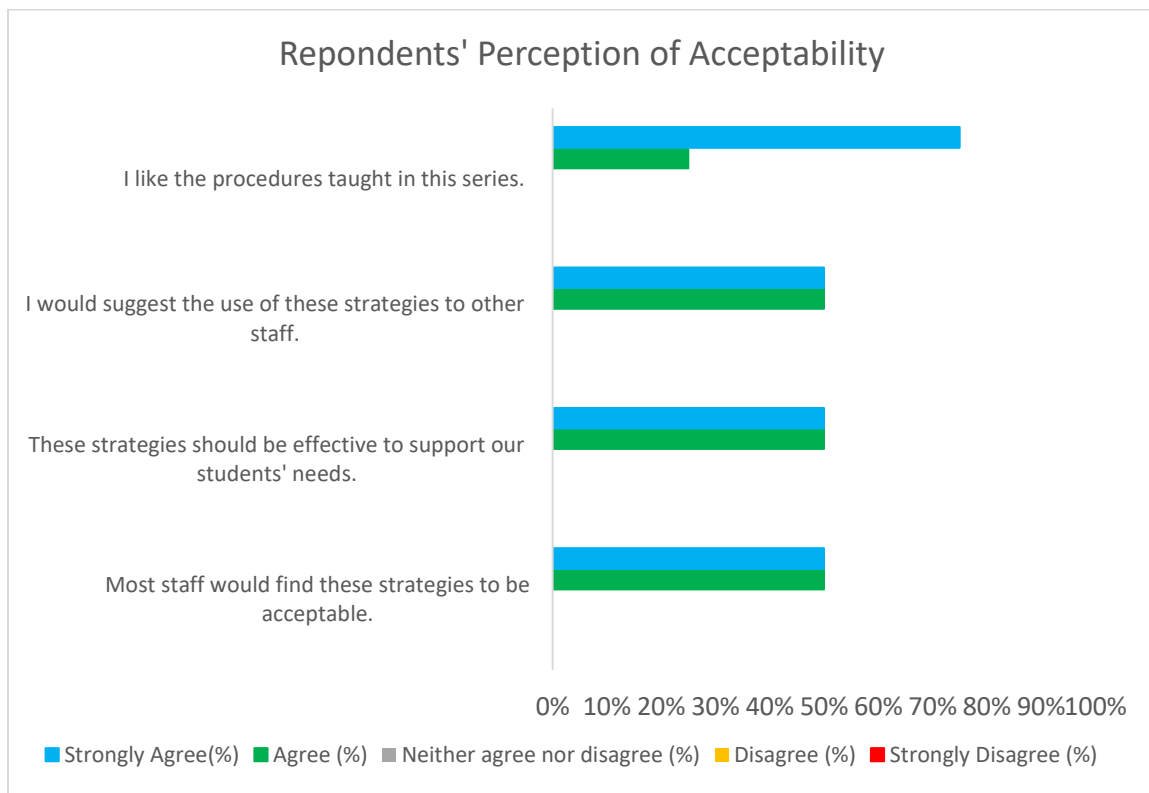responses to the final feedback survey questions.

Figure 1 Respondents' Perception of Acceptability

All of the participants either agreed or strongly agreed with the acceptability statements. For the statement "I like the procedures taught in this series", three out of four respondents indicated they strongly agree.
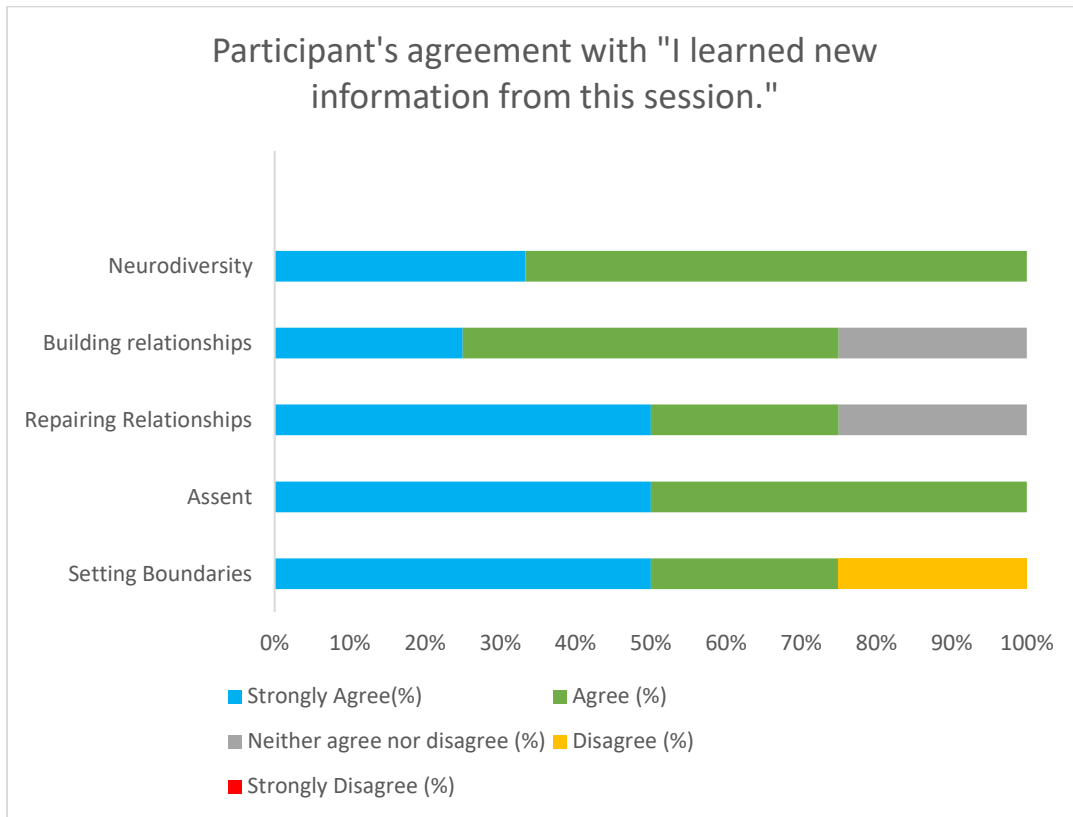
Figure 2 Respondents' Agreement to "I learned new information from this session."

When prompted to respond to the agreement with "I learned new information from this session," all participants agreed or strongly agreed that they learned new information from the neurodiversity and assent sessions. One person responded, 'neither agree nor disagree' for the building relationships and repairing relationships sessions. One person responded "strongly agree" for the building relationships session and two people responded "strongly agree" for the rebuilding relationships session. One person indicated they disagreed with the statement "I learned new

information from the setting boundaries session", with the remaining respondents agreeing or strongly agreeing.

Table 15 Respondent Quotes to Survey Questions

Survey Question	Respondent Quote (provided anonymously)
Describe some of the strategies you implemented.	Respondent 1: "I utilized strategies connected to relationship building and repairing relationships with a student I felt I had been struggling with."
	Respondent 2: "Make relationships with students and make them confident to share what they are."
	Respondent 3: "I have found myself giving them more undivided attention and showing more interest in their topics."
	Respondent 4: "Relationship building, connection"
Please provide an example of how you used this learning with a student	Respondent 1: "I changed my approach with students seeking connection and task avoidance simultaneously. Instead of setting expectations and then removing attention, I started letting those students know that I heard them and wanted to talk with them, too"
	Respondent 2: "They were observed students behavior and flexible solutions for their behavior or needs."
	Respondent 3: "With a student coming back after being gone for a couple weeks, I have found setting boundaries and sticking to them helpful. I let the student know that as long as they are in their space and raise their hand when they have a question or need help that I would come to them if not busy or I will tell them that I will be over in just a moment. While it is talking some time to learn and adjust too, it does seem to be helping."
	Respondent 4: "I had a student that only knew me as the person pushing him to do hygiene. Made a effort for him to see me in other roles and connect."

Explain one barrier you experienced to implementing these strategies	Respondent 1: "I have a student who ups the ante when provided with connection. It was challenging because it seemed like he always wanted more and more.
	Respondent 2: :Make rapport with students was challenging."
	Respondent 3: "One barrier that I have experienced when implementing these strategies is changing my mindset from attention seeking to connection seeking. It is something that I am finding myself having to remember or remind myself of almost daily."
	Respondent 4: "I was scared at first but gained confidence as I used them."
Has your view of student behavior changed? Please explain why or why not.	Respondent 1: "Changing my view to connection versus attention has been a big shift for me. I feel like it has also allowed me to just view things with a more compassionate lens."
	Respondent 2: "After all student had confidence on me and started to follow the direction of teacher."
	Respondent 3: "I make sure to give behavior specific praise often to the students who are following the expectations."
	Respondent 4: "I do believe that how I view student behavior has changed. My biggest takeaway is some students not getting the connection or attention they need and deserve from their home life so they will find any way to get it at school. The student and I have connected and developed a bond."

4.5 Summary of Results

The data reviewed indicates that Susan demonstrated the ability to acquire the four skills to proficiency quickly. Paul, Josh, and Samantha achieved similar levels of accuracy. Jenny demonstrated modest skill acquisition. The participants responded most positively to the assent and neurodiversity modules when asked to reflect on whether they learned new content. One person either responded neutrally or disagreed that they learned new content from the other modules, with the other respondents responding positively.

5.0 Discussion

This study aimed to increase the use of compassionate care skills among paraprofessionals. Data indicates that the participants demonstrated the ability to acquire these skills. While specific baseline data were not collected, participants overwhelmingly reported learning new content. For the assent module, all participants self-reported a baseline of zero. All participants increased their skills from 38% to 100%, a significant increase from zero. The participants rated these strategies positively and their perceptions indicate that these strategies would be helpful for students in the program.

5.1 Key Findings for Inquiry Questions

This dissertation, in practice had two guiding inquiry questions to lead the systematic inquiry, understand the impact of my change idea, and promote improvement efforts.

1. To what extent does the teaching interaction procedure improve paraprofessionals' compassionate behavior support skills?

2. Do the compassionate care skills of paraprofessionals impact the improvement of severe problem behavior?

These questions guided the improvement effort and the overall PDSA cycle. A summary of the data relevant to these questions is provided below.

5.1.1 Inquiry Question 1

While a causal relationship cannot be demonstrated from these data, it appears this methodology was effective at teaching a new skill to paraprofessionals. On the whole, these were new skills to most of the participants. Baseline data was not collected, but staff reported that they acquired new learning and expressed during interviews and sessions that they had not considered using these skills. For example, during the assent session, one participant said, *"I've never heard of it before; I don't get why we haven't always been doing this?"*. This comment suggests that her baseline was near zero for this skill. That participant increased to 43% accuracy of the skill. There is room for growth and improvement in the skill, but that is a significant increase in skill in a short amount of time.

With one participant commenting, *"Just talking about it made the think about it more"*, it cannot be said which component of the TIP had an effect. The TIP consists of both instruction on the rationale and performance feedback. Performance feedback effectively increases teacher use of behavior support skills such as positive praise (Codding et al., 2013). Self-monitoring and written performance feedback has also shown efficacy in increasing teacher use of equitable praise and discipline practices (Knochel et al., 2022). This relevant research supports the use of performance feedback as an efficacious intervention.

The final noteworthy point is that the participant with the highest score on the Compassion Scale consistently demonstrated the highest level of accuracy across all skills. This could be confounded because she is also a former RBT who was a clinical manager of an ABA clinic. However, this does not align with previous literature that people who enter ABA fields tend to have lower levels of Behavioral Artistry and the criticism that ABA is uncompassionate.

It is possible, however, that a person with ABA training more readily learns new skills and generalizes them in their practice.

Jenny scored lowest on both the Compassion Scale and the Beliefs about Behavior Scale She also scored demonstrated the least accuracy with all of the skills. However, Jenny did show insight into her behavior and demonstrated improvement over baseline. This reinforces both the need for direct teaching of these skills and the potential efficacy of the teaching interaction procedure.

5.1.2 Inquiry Question 2

As expected, the data relevant to this inquiry question is distant from the professional development series. However, I can make some preliminary assessments in the high school classroom where Susan, Samantha, and Paul work, two students receive the support of a Behavior Intervention Plan. One of those students, Regina, is educated outside of the classroom in a separate classroom with a one-on-one staff. Two of the participants in the study are among the three staff that support this student, the third being the intervention specialist. Regina experiences a significant behavioral crisis, which involves intense physical aggression, running into the street, and disrobing in public spaces. As such, when the behavior cannot be successfully prevented or de-escalated, seclusion is used to prevent injury and protect privacy. At times when seclusion is not practical, a restraint will be used to prevent her from running into the street.

During the 2022-2023 school year, 88 episodes of seclusion occurred and 14 restraints with Regina. From August to February, there have been six episodes of seclusion and zero restraints, marking the least frequent level of crisis of her entire school career. This improvement marks a 94% decrease in restraint and seclusion from the 2022-2023 to the 2023-2024 school

year. The same Behavior Intervention Plan is in place across both school years with the same environment and intervention specialist. To the knowledge of the team, no other factors have changed.

A second student in the high school classroom, Sam, also has a Behavior Intervention Plan. The data that is currently available for progress monitoring is the frequency of restraint, seclusion and transport (RST). Figure depicts the frequency of RST over the 2023-2024 school-year. In September, 21 incidents of RST occurred and 14 incidents occurred in October. In February and March, one incident occurred each month. This represents a decrease of 95.2% and 92.8% respectively.
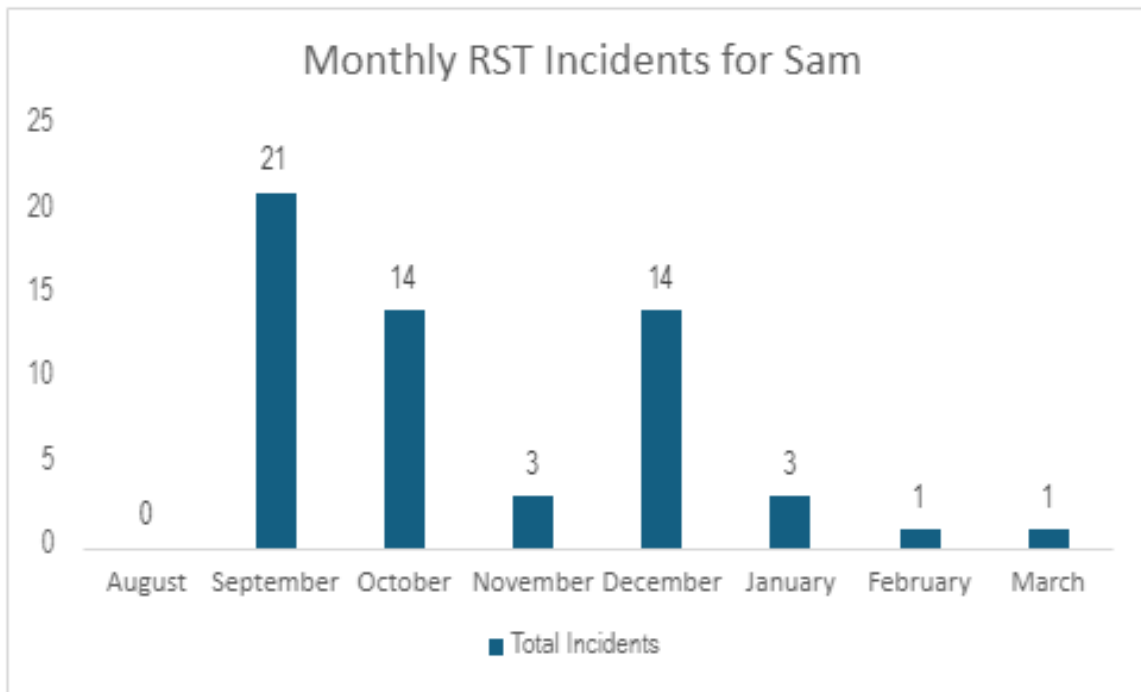

Figure 3 Frequency of RST Incidents for Sam

In ABA, it is commonly accepted that many factors may impact behavior, and some motivating operations can remain elusive. The staff's behavior change is likely one factor influencing the student's behavior change, given that restraint and seclusion a marker of staff behavior rather than the student behavior. Staff may be selecting other methods instead of restrictive and reactive strategies for these students.

RST data was analyzed program wide. Figure 4 represents the total frequency of RST across all students per quarter from the beginning of 2022 through quarter three of the 2023-2024 school year. There has not been a significant decrease in the use of seclusion from the start of the 2022-2023 school year through quarter three of the 2023-2024 school year, with the exception of quarter four of 2022-2024. In November 2022, two students left the school who had previously experienced high rates of seclusion. This may account for the decrease in frequency of seclusion during fourth quarter of 2022-2023.

Incidents of Seclusion and Restraint

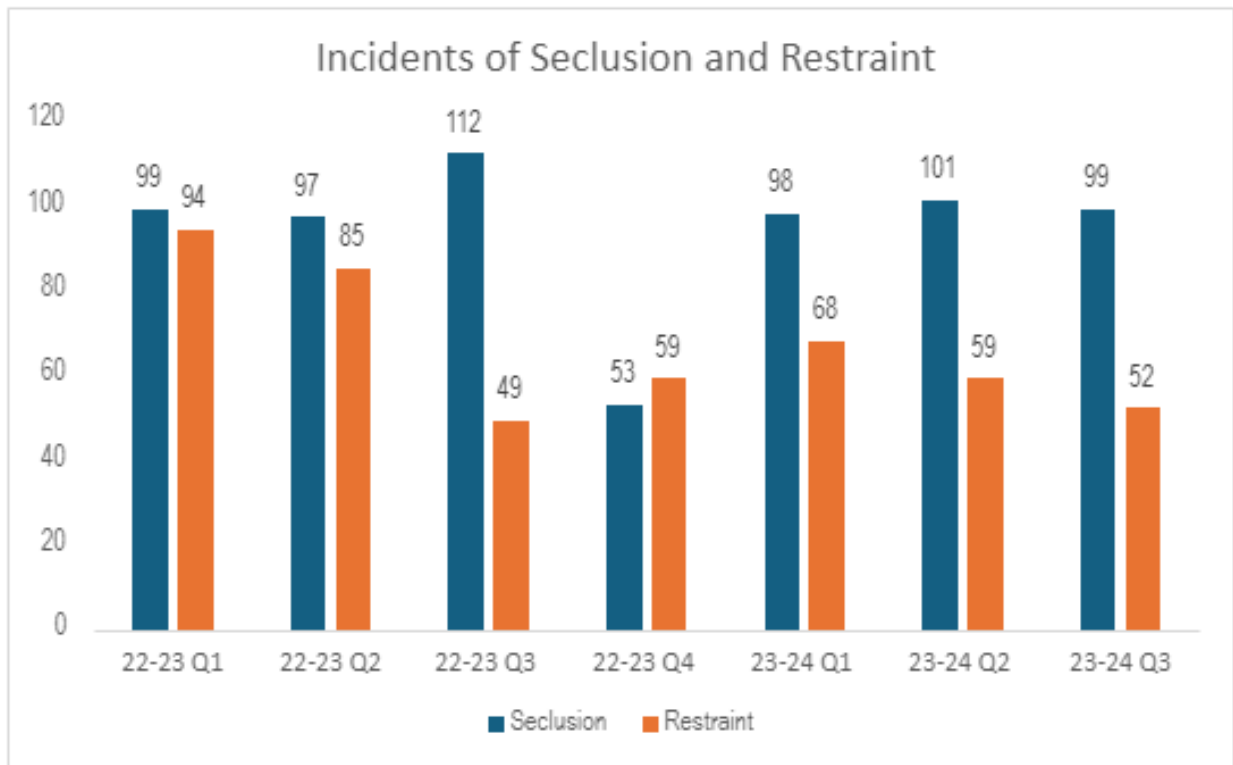| Quarter	Seclusion	Restraint
22-23 Q1	99	94
22-23 Q2	97	85
22-23 Q3	112	49
22-23 Q4	53	59
23-24 Q1	98	68
23-24 Q2	101	59
23-24 Q3	99	52

Figure 4 Program-Wide Frequency of RST

The initial hypothesis was that, while the aim of this change idea, the short timeline of this intervention would not be sufficient to evaluate change in student behavior. It does appear that the change idea has not impacted whole-building use of RST. However, for two students in the classroom with four of the participants, RST has reduced by over 90%. It is unclear if this is a causal relationship between the professional development series and the behavior of staff. However, it is promising and worthy of future study.

5.2 Summary of Findings

The student interviews yielded information that suggests connection and relationships are essential to students. Each of the students vocalized a statement regarding a personal connection they had with their staff. For example, Regina referenced visits and hugs. Austin also referenced hugs and time to talk. Austin's comments suggest that shared interests are essential to him, an important component of pairing. Austin demonstrated a strong emotional reaction when discussing a teacher that is not a preferred person in his life. Aiden noted that he is frustrated by the need to get staff's attention. Aiden mentioned previously relationships that are strong memories in his mind.

Each participant showed some ability to acquire the skills. Those with higher levels of compassion showed higher levels of accuracy. However, even the participant with the lowest level of accuracy commented on her learning positively and reflected genuinely on the experience. In the final feedback survey, the participants agreed that assent was new learning. For building and repairing Relationships, one respondent indicated neutral with the rest

indicating that it was new learning. In the qualitative feedback, participants commented that 'connect' or 'connection' in nearly all of their comments.

5.3 Limitations

Some limitations exist within the study's design and the interpretation of the results. These include self-report methods, the time allowed for the sessions, the breadth and depth of student interviews, and the generalizability of participants' survey results to the whole staff. These limitations can be mitigated by further replications and scaling up of the methodology.

5.3.1 Use of Self-Report Measures

Two modules used self-report measures instead of direct observation and performance feedback. The skills of setting boundaries and repairing relationships occur in unpredictable moments. To conduct direct observation, the observer would need to be present for long periods to have the opportunity to observe this skill. In public school settings, time is a limited resource and, therefore, a self-report method was chosen. Self-report can be unreliable, with the tendency for people to rate themselves favorably. However, it should be noted that the accuracy data on the self-report measures is not significantly higher than the data on the direct observation measures. This suggests that, in this instance staff tended to rate themselves honestly.

Additionally, reliability is not gained between the researcher and self-rater to ensure agreement between positive and negative scores. The self-rater may perceive the skill was

performed, whereas the researcher may not have rated them as such. The results must be interpreted at face value. Future replications should be planned for more direct observation.

5.3.2 Generalization and Maintenance

As time is limited in school environments, sessions occurred quickly with little observation time. This meant that participants received the training on a Wednesday and were assessed Thursday through Tuesday and the following week. Ideally, the staff would have had more time for performance rehearsal before being assessed on the skill. Because time was limited, generalization and maintenance were not assessed. It is unclear if the participants used these skills with other students or in other contexts beyond the initial observation. Additionally, time did not permit revisiting previously learned skills. Therefore, it is unknown if participants maintained each skill from week to week.

5.3.3 Limited Student and Staff Perceptions

The perspective of students is limited and insufficient. Four students were interviewed. One interview yielded information that was difficult to interpret accurately. The students' perspective is crucial in understanding the problem, designing potential solutions, and measuring the results of those actions. However, our ability to accurately obtain students' perceptions is limited only by the communication skills we have taught them and our knowledge of the supports that promote their success. A future option would be to incorporate families in the interview process and investigate the potential role of technology as a communication aid.

A final limitation is the limited perception of only five staff members. The program currently has over 40 staff members and is growing yearly. Participants were chosen because of their position in a classroom with a teacher aligned with the need for change. However, this may skew them toward one end of the compassion spectrum. They have already had informal training on positive behavior supports and are inundated with the personality traits of a highly compassionate teacher. Many professionals in the program, including teachers, are less aligned to this effort and fall toward the other end of the bell curve. Understanding the whole staff's perspective before initiating more extensive scale change actions would be an important next step.

5.4 Recommendations

The program has grown rapidly in the past five years to meet the community's needs. This has necessitated significantly more staff to support the increased number of students. Hiring has been an ongoing challenge, particularly with post-covid staffing shortages in education. The increased need for staff and limited ability to find highly qualified staff has led administrators to hire staff that do not have the level of soft skills the job requires. However, the program's mission and vision should be communicated during the interview process as the premise by which employees are being hired. Potential employees could then decide if the program's values and mission match their value set. Furthermore, non-negotiable staff behaviors stemming from program values can be communicated during interviews and program tours to ensure common expectations.

After employees are hired into the program, a formal onboarding process would be beneficial to train foundational skills and communicate consistent expectations to all staff. The concepts and strategies can be incorporated into a comprehensive staff training program for initial staff onboarding and ongoing professional development. A documented universal set of strategies that all staff are expected to adhere to would ensure a baseline level of compassionate and positive behavior support. This would also operationalize the program's value of 'compassion' as some staff have provided feedback that has not yet been clearly defined. Furthermore, it is understood in improvement science that those closest to the problem are most uniquely suited to solve it. In this case, several teachers, behavior interventionists, and paraprofessionals demonstrate high accuracy with these baseline skills. Those people should be empowered to lead the change effort and coach other staff from the bottom up.

5.5 Conclusion

The professional development series shows promise in teaching paraprofessionals skills related to compassionate behavior support. The series also began shifting the system toward more conversations about supporting students more compassionately. While it remains to be seen if the teaching interaction procedure was the catalyst for that change, staff reported they learned new content and perceived the strategies positively. Therefore, scaling up this professional development and incorporating these strategies into a more considerable system-wide effort is a practical next step. However, it is necessary first to understand the perspective of more students and the staff's perception of the problem.

It is unlikely that the professional development series is the cause of these changes, given the short time period and small number of participants. It is more likely that the work surrounding this dissertation in practice was more of the catalyst for change. I cannot say for certain if any conversation around 'compassion' was present before any of this work. During my first 1.5 years of employment with the school, conversations about compassion were in the background. However, at that time, the school identified goals around reduction of restraint and seclusion, PBIS, and evidence-based practices for teaching Autistic children. With these priorities and goals in mind, the system gradually embraced a shift from positive behavior support to compassionate care as this DIP progressed. Many people at all levels of the organization have been allied to this change.

5.6 Reflection

Improvement science and the education doctorate are not just about connecting research and practice. It is about thoroughly understanding the full context in which a problem is situated. It can be compared to a functional or ecological assessment of problem behavior. We cannot solve a problem without a deep and intimate understanding of all the factors contributing to it, whether it be a problem of practice or a challenging behavior. Staff behavior in the school system will not change until the school system changes to support that behavior change, just like behavior will not change unless the environment in which it is occurring changes. I found my learning throughout improvement science and this dissertation in practice to be quite like organizational behavior management. With the methodical and analytical background of ABA, I found improvement science relatable and an extension of my current understanding. I have

always tended to over-analyze, sometimes to a fault. However, perhaps that can be seen as a benefit in this process. People often speak of being 'solutions-oriented' in education and our professional lives. While focusing on the past can drag conversations on too long, I have learned that enough time is not spent thoroughly analyzing the problem.

Throughout this journey, I have held closely to the phrase in improvement science 'the people closest to the problem are most uniquely suited to solve it'. I have found this to be incredibly accurate. The further away we get from the problem, the more out of touch we are with the problem and potentially ineffective our solutions are. The people closest to the problem must drive this change and identify solutions. The valid criticism of ABA stems from people being distant from the problem and attempting to solve their perception of the problem. These people have been labeled 'experts' in autism when very few of them are Autistic and experience that reality. As a special education system, we continue to place great emphasis on these experts and other people in positional authority to design solutions and solve problems for disabled students when virtually none of those adults have first-hand experience with disability. In ABA, we design behavioral interventions with very little understanding of what it truly means to be Autistic, of the reality of that lived experience. These students continually have behavioral interventions 'done to them' without their agreement or willing participation, over and over for their entire lives. The criticism of ABA is too real to ignore, and the need for a significant change in the field is dire. However, the motivations to keep the status quo are high. The education system is notoriously resistant to change, and funding is plentiful for ABA. Reformation in ABA and special education will not come easy and will take grassroots activism and policy change at all levels. In the meantime, it is incumbent on us to ally ourselves and use our position of power

to create change from within. We can do this by listening to and learning from our students and advocating for policy change within the organization that will shift the power differential.

Appendix A Appendices and Supplementary Information

Appendix A.1 Fishbone Diagram

Primary Drivers of Compassionate Care in ABA Settings

ENTERING THE FIELD
- students with high BA enter other human service fields
- people entering ABA have preconceived ideas of the field

TRAINING
- does not include interpersonal skill dvpt
- hasn't caught up to growth
- ongoing mentoring

ABLEISM
- awareness of neurodiiversity
- stereotypes of autism
- medical model of disability

BURNOUT
- demand is too high
- time for PD and mentorship
- insufficient support

PRACTITIONERS OF ABA MAY OPERATE WITHOUT ESSENTIAL INTERPERSONAL SKILLS.

Figure 5 Primary Drivers of Compassionate Care

Appendix A.2 Theory of Improvement
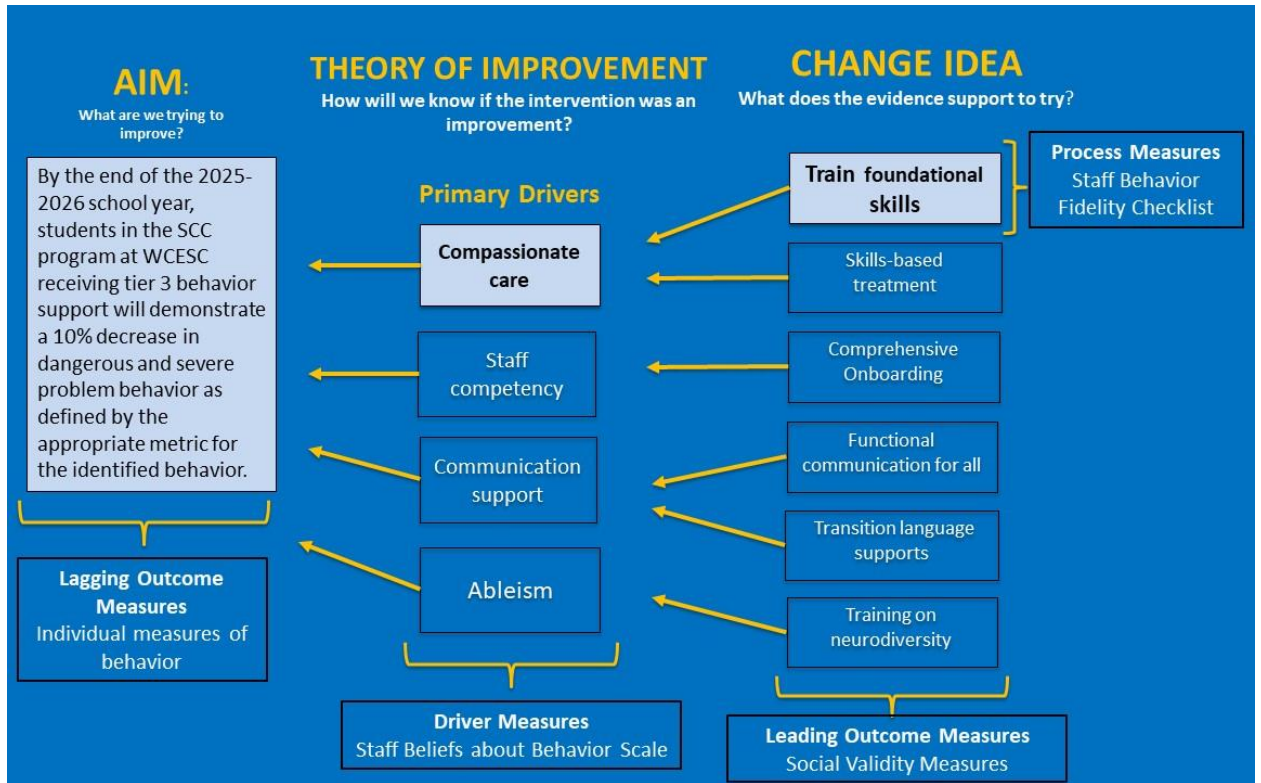
Figure 6 Theory of Improvement Diagram

Module 1: Understanding Neurodiversity

Participant will be able to:

1. Define neurodiversity
2. Discriminate neurodiversity model from medical model of disability
3. Describe one benefit of shifting mindset to the social model of disability and one harm of ableism.
4. Explain one way this shift will inform their practice.

Module 2: Building Therapeutic Rapport

Participant will be able to:

1. Define pairing
2. Give meaningful rationale
3. Identify students' interests
4. Engage with student in meaningful way
5. Increase reinforcement and decrease demands
6. Gradually increase demand and decrease reinforcement

Module 3: Rebuilding Rapport

Participant will be able to:

1. Identify causes of relationship breakdown
2. Give meaningful rationale
3. Identify student's perspective
4. Apologize for mistakes if appropriate
5. Use non-judgmental language
6. Reflect message and perceived emotion
7. Revisit pairing (increase reinforcement and decrease demand)

Module 4: Assent

Participant will be able to:

1. Define assent
2. Provide a meaningful rationale for gaining assent
3. Identify assent behaviors for their student
4. Identify in-the-moment when assent is gained
5. Request assent before touching the student
6. Identify assent withdrawal behaviors for student
7. Acknowledge when assent is revoked
8. Modify their own behavior to regain assent

Module 5: Establishing Boundaries

Participant will be able to:

1. Create safe environment to hold boundaries
2. Identify unavailables
3. Ensure team agreement
4. Communicate and teach boundaries to student
5. Set boundary as soon as possible
6. Hold the boundary: use reflective listening, be present and wait
7. Revisit and reflect

Appendix A.4 Example Skill Checklist

Skill Checklist: Obtaining and acknowledging withdrawal of assent

The learner will be able to:

1. Define assent	Yes No Feedback given_____
2. Provide a meaningful rationale for gaining assent	Yes No Feedback given_____
3. Identify assent behaviors for their student	Yes No Feedback given_____
4. Identifies in-the-moment when assent is gained	Yes No Feedback given_____
5. Requests assent before touching the student	Yes No Feedback given_____
6. Identify assent withdrawal behaviors for their student	Yes No Feedback given_____

7. Acknowledges when assent is revoked	Yes No Feedback given_____
8. Modifies their own behavior to regain assent	Yes No Feedback given_____

Appendix A.5 Participant Information Guide

Promoting Compassionate Care in an Alternative Education Setting:
An application of the Teaching Interaction Procedure

What?
Teaching Interaction Procedure
       1.Label
       2.Provide meaningful rationale
       3.Describe
       4.Demonstrate
       5.Provide feedback
Compassionate Skills
      Intro session: Understanding Neurodiversity
      Session 1: Building therapeutic relationships
      Session 2: Repairing therapeutic relationships
      Session 3: Obtaining assent and acknowledging withdrawal
      Session 4: Establishing Boundaries

How?
Each session will consist of a small group meeting followed by in-classroom time for coaching and feedback on the skill. The small group meeting will follow the format of a 15-minute instructional overview of the concept and 15-minute group discussion.
During in-classroom coaching time, I will schedule a 15-minute time to you implementing that week's skill and provide feedback.

Compensation:
You will be compensated by me, Kim Gregory, for your participation in the sessions. Each session will be worth $20, for a total of up to $100 if all sessions are completed. Compensation will be provided on an Amazon gift card and will be delivered within 2 weeks following the final session.

Note:
Your participation is optional and this study is not sponsored by the ESC.

Appendix A.6 Student Interview Consent Form

Interview Informed Consent
Dissertation Proposal: Promoting Compassionate Care in an Alternative School Setting: An application of the Teaching Interaction Procedure

Name of Researcher: Kim Gregory, BCBA COBA

Student's Name: _____

My name is Kim Gregory. I am a Board-Certified Behavior Analyst in the Social Communication Classroom Program at the Western Row Campus where your student attends school. I am pursuing a Doctoral Degree in Special Education at the University of Pittsburgh. My dissertation aims to study a series of professional development modules for paraprofessionals to teach skills related to compassionate care.

This professional development series will be piloted with a small group of paraprofessionals across two classrooms. As part of this research project, I would like to interview your student about their perception of the relationship they have with the paraprofessionals in their classroom. The interview questions will be modified to each students' unique communication needs. Your child's Intervention Specialist will attend the interview to ensure your student accurately understands the questions. Interviews will occur before and after the series of trainings to assess the impact of the professional development series.

This research study is to be submitted in partial fulfillment of requirements for the degree of Doctor of Education at The University of Pittsburgh. The results of this study will be published as a dissertation. The information gained from this interview is confidential and will not be shared beyond this dissertation.

My child/student may participate in this interview.

_____
Signature: **Date**:

_____
Print:

Appendix A.7 Student Interview Outline

Student Name: _____

Paraprofessional Name: _____

Date of Interview:_____

1. It is important that my teacher understands me.	Yes	A little bit	No
2. I noticed a positive difference in the way my teacher interacts with me.	Yes	A little bit	No
3. This difference lasted more than a few days.	Yes	A little bit	No
4. I noticed my teacher interacting with other students in a more positive way.	Yes	A little bit	No
5. I would like this change to continue.	Yes	A little bit	No

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