EVALUATION OF A TRAINING TO ENHANCE INTERACTIONS BETWEEN FIRST RESPONDERS AND AUTISTIC CHILDREN

by

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(Under the Direction of Scott P. Ardoin)

ABSTRACT

Police officers have an increased likelihood of encountering individuals with a neurodevelopmental disorder, such as autism spectrum disorder (ASD). Yet, many police officers report receiving little to no training on how to recognize the signs and symptoms of ASD, let alone on how interact with an autistic individual. With the lack of proper training police officers may potentially be unable to support autistic individuals and their families during a behavioral crisis. The current study evaluates the effects of current training practices on police officer's acquisition of the skills necessary to successfully interact with autistic children engaging in behavioral outbursts. Three active-duty police officers participated in the current study. Overall, results of the current study show behavior skills training was necessary for participants to demonstrate high levels of appropriate responding and low levels of inappropriate responding during the skill sessions.

INDEX WORDS: autism spectrum disorder, challenging behavior, police officer

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DEDICATION

This thesis is dedicated to my entire family. My mom is a retired teacher who continues to work in schools to shape the minds of the children she teaches and ensure that no child goes without the education and love they deserve. She has continually demonstrated love, care, and compassion for all children no matter their abilities, home life, or behaviors. She taught me how to love all children because they are someone's baby and deserve to be treated as such. My sister is a hardworking military personal who has always challenged me both academically and athletically throughout our lives. My sister and I were in a graduate's program simultaneously and we were able to compete for grades and encourage each other throughout the process. My husband, who always supports me and continues to be my biggest fan and shoulder to lean on. Most of all, this thesis is dedicated to my dad. My dad instilled in me determination, grit, and hard work. He is a devoted, lifelong first responder. My dad joined the military, as a marine, after high school and then went to college to be a police officer following his return home from active duty. He has been a police officer for 27 years. He taught me what it was like to care about the people you are working with or working for (i.e., the victims, suspects, and everyone in the community) and to always continue to expand your knowledge to better yourself for yourself and for the people you serve.

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CHAPTER 1

INTRODUCTION

The prevalence of autism spectrum disorder (ASD) continues to grow with the recent reports indicating 1 in 36 (2.8%) children receiving the diagnosis (Center for Disease Control, 2020). Given the continued increase in prevalence of ASD (Center for Disease Control [CDC], 2020) there is an increased likelihood of first responders, such as police officers, of encountering autistic individuals (Christiansen et al., 2021). Christiansen et al. (2021) found that autistic individuals are seven times more likely to encounter police officers than neurotypical persons.

Rava et al. (2016) identified that approximately 20% of the autistic adolescent population had been stopped and questioned by police and nearly 5% of those encounters led to arrests.

Although encounters between police officers and autistic individuals are more likely to occur, there is minimal research conducted regarding police officer's understanding of the signs, symptoms, and characteristics of ASD. There are some notable exceptions to this. For example, Modell and Mak (2008) conducted a study that indicated out of 124 police officers surveyed in the United States only 20% of the sample reported the ability to identify the defining characteristics of ASD. In addition to this finding, Modell and Mak (2008) reported that 35% of the sample associated the characteristics, mannerisms, and behaviors associated with ASD to a film released in 1988 "Rain Man." Christiansen et al. (2021) found that in Cleveland, Ohio, 34.8% of police officers reported having personal encounters with ASD when on duty, but only 52.9% of those police officers reported receiving training pertaining to ASD, and 56.9% reported little to no knowledge about ASD. Studies that have been conducted regarding police

officers' interactions and understanding of ASD indicate that although police officers are concerned about how to handle situations involving autistic individuals, they are generally not knowledgeable and receive minimal training (Chown 2010; Christiansen et al., 2021; Crane et al., 2016; Gardner et al., 2019; Railey et al., 2020; Tint et al., 2017).

The training that police officers are required to obtain regarding neurodevelopmental topics varies from state to state. As of 2018, only 27 states and the District of Columbia had passed laws that required police officers to attend a training regarding mental health, substance abuse, developmental disorders, or behavioral disorders, and none of these trainings were tailored specifically to ASD (Stavropoulos, 2020). Since 2018, other states have started requiring law enforcement officers to obtain training regarding ASD and other neurological and behavioral disorders (*Law Enforcement Legislation – Significant Trends 2022, 2022*). When police officers do contact training related to neurodevelopmental disorders, many required training courses are identified as some form of didactic training (Herbert et al., 2022). In April of 2020, Georgia began requiring that all sworn-in officers of the state are to take a 2-hr. online course regarding ASD and de-escalation tactics (Georgia Department of Public Safety, 2023). Michigan requires a 3-hr. course that highlights mental health and developmental disabilities and includes ways to identify common behaviors and how to appropriately respond when working with people with developmental disabilities or mental health disorders (Soares et al., 2019).

Individuals diagnosed with ASD may exhibit differing characteristics than those of a neurotypical person and with the lack of proper training and ability to recognize these characteristics police officers might be unable to adequately assist autistic individuals (Wallace et al., 2022). To receive an ASD diagnosis, individuals must meet specific requirements as outlined by the Diagnostic and Statistical Manual of Mental Health Disorders-Five (DSM-5), to

include persistent deficits in social communication and social interactions across multiple context (American Psychiatric Association, 2013). These social deficits include deficits in: (a) social-emotional reciprocity ranging from abnormal speech to failure to communicate in backand-forth conversation; (b) nonverbal communicative behaviors (e.g., eye contact, body language, difficult understanding gestures and facial expressions); and (c) the development, understanding, and maintenance of social relationships (American Psychiatric Association, 2013). Police officers are trained to recognize deception and passive resistance (i.e., lack of eye contact, fidgeting, failure to answer direct questions, creating spatial distance) when interacting with others, yet many of the communicative behaviors exhibited by an autistic individual (e.g., lack of eye contact, difficulty answering questions) is due to their social communication deficits (Wallace et al., 2022). Communication deficits might further exasperate an autistic individual's behavior when interacting with a police officer (Lerner, 2012). For example, autistic individuals are more likely to become agitated and attempt to leave or get away from the police officer when being questioned due to the increased response effort of communicating during crisis situations (Slavyn-Cross et al., 2022).

Although not a diagnostic characteristic of ASD, there is an increased risk of autistic individuals are at an increased likelihood of engaging in challenging behavior (e.g., aggression, destruction, self-injury, elopement, lack of eye-contact, lack of communication skills) (Edelson, 2022). Research suggests that barriers in communication can exacerbate challenging behavior exhibited by autistic individuals (Tsai et al., 2020). When autistic individuals are ineffective in communicating their wants and needs with others, the deficit can lead to the individual engaging in challenging behavior as a form of communication (Williams et al., 2017). For example, an autistic child who wants their caregiver's attention but lacks the repertoire or skills required to

ask, might engage in challenging behavior as a form of communicating their desires. The increased risk of challenging behavior might cause these individuals to engage in behaviors that require police officer involvement, as evident by the increased levels of autistic adolescents being charged with battery and assault compared to same-aged neurotypical adolescents. (Lerner et al., 2012). Given police officers lack of training related to ASD the challenging behaviors exhibited by autistic individuals are likely to be viewed by police officers as guilty, threatening, or defiant (Salerno-Ferraro & Schuller, 2020).

In addition to the communication deficits and increased likelihood of engaging in challenging behavior, autistic individuals may demonstrate a mismatch between their stated-age and cognitive functioning (Sabariego-Navarro et al., 2022). Some neurodevelopmental disabilities such as ASD are not immediately distinguishable by a passing bystander (Cureton & Hill, 2018). This could be problematic because it may lead to police officers holding inaccurate expectations for the individual due to their physical appearance (Salerno-Ferraro & Schuller, 2020).

A police officer's lack of training regarding ASD and failure to engage with autistic individuals appropriately has resulted in detrimental outcomes for multiple autistic individuals. National news coverage highlights tragic outcomes of severe injury, mental distress, and even death regarding interactions between police officers and individuals in the autistic community (BBC News, 2020; Brasch, 2014; Deliso, 2014). For example, in 2020 a frantic mother's call to 911 ended with police officers shooting her 13-year-old autistic son (BBC News, 2020). Similarly, a 14-year-old boy was tazed by police officers when they mistakenly identified him as a suspect (Deliso, 2024) and a 15-year-old boy was shot and killed by police during a behavioral crisis (Brasch, 2024). Each of these cases consisted of police officers using excessive force when

interacting with autistic individuals who were attempting to flee the scene. These examples, provide evidence of the need for police officers to receive specialty training on how to effectively interact with autistic individuals.

With the number of detrimental interactions between police officers and autistic individuals, it is vital that police officers are educated on not only the characteristics of ASD and challenging behaviors individuals might engage in, but also on how to effectively use deescalation strategies with the autistic population (Lartey, 2024). Yet there remains minimal research conducted regarding training methods for enhancing these interactions. As stated previously, when police officers do contact trainings related to neurodevelopmental disabilities, many training courses are identified as being some form of didactics. Didactic instruction is a lecture style of learning in which instruction or demonstration is presented to the learner without involving any active participation by the student (Marriam-Webster, 2022). Didactic instruction enables an individual or a group of learners to contact information but offers minimal to no hands-on-practice (Morrier et al., 2010). Didactic training is an effective method of disseminating information to learners but may not result in the intended acquisition of the skills being taught (Morrier et al., 2010). Didactic instruction alone is likely not sufficient given that research suggests role play and feedback are critical components to skill acquisition (Parsons et al., 2012). One critical component to skill acquisition, role play, aids in fostering skill development, increasing confidence in performing skills, and allow trainees to immerse themselves in simulated scenarios similar to those they may face in the field (Rosales et al., 2009). Like role play, the feedback provided during role play is a vital component to skill acquisition (Miltenberger et al., 2017). Feedback allows the trainee to immediately receive

information regarding their performance and continue to immerse themselves within the scenario until mastery of the desired skill (Parsons & Reid, 1995).

Behavior skills training (BST) is a commonly implemented method of training that utilizes both role play and feedback (Schaefer & Andzik, 2020). BST is a multielement training procedure that targets the understanding of a targeted concept as well as the correct implementation of the skill (Hogan et al., 2014). The recommended sequence for conducting BST is (a) instruction (describe the behavior and in what context the behavior should occur); (b) model the behavior using role play; (c) have the learner rehearse the demonstrated behaviors utilizing a role play scenario; (d) provide feedback and further instruction on incorrect implementation of the desired behavior and praise for the correct implementation; (e) repeat this sequence until the learner engages in the desired behavior without receiving feedback (Miltenberger, 2008). BST has been used to teach individuals a multitude of novel skills (Sarokoff & Sturmey, 2004), such as implementing healthcare procedures (Jull & Mirenda, 2016), implementing behavioral interventions (Johnson et al., 2005), installing automotive parts (Sherman et al., 2021), teaching stranger awareness (Tarasenko et al., 2005), and leisure activities such as skateboarding and video games (Thomas et al., 2016). Gatheridge et al. (2004) conducted a study with 45 children under the age of seven where the researchers evaluated the efficiency of two programs (i.e., instructional child friendly video and BST) designed to prevent gun play among children. Results implicated that both methods of instruction were effective for teaching children to verbalize gun safety messages but the participants who received BST were significantly more likely to demonstrate the desired gun safety skills during a role play scenario than those who engaged in the instructional video (Gatheridge et al., 2004). Furthermore, Hogan et al. (2014) evaluated the use of BST to increase the fidelity of implementation of students'

behavior intervention plans with four teachers. This study was conducted with students in a school setting. Results indicated that following the instruction component of BST the teachers did not demonstrate an adequate increase in implementation fidelity, but following the model, roleplay, and feedback components all teachers significantly increased implementation fidelity of the students' behavior intervention plans (Hogan et al., 2014). Although research suggest that BST is an effective method of teaching skills to various learners (Miltenberger, 2008), research has yet to substantiate the effectiveness of such approach to teaching police officers to engage with autistic children. Specialized training, such as BST, and increased knowledge about ASD could aid in remedying enhanced interactions with police officers and autistic children, but supporting research is sparse.

To date there is no research on evaluating the use of BST to train police officers effective strategies for de-escalating a behavioral crisis involving autistic children. The current study first evaluates the effectiveness of the typical didactic training provided to police officers on increasing accurate responding and decreasing inappropriate responding during a simulated behavioral crisis. Second, the current study implemented BST with participants for which didactics alone was ineffective to determine its effects on performance. Outcomes of the current study provide information regarding the effects of these training methods on assisting police officers in developing the necessary skills to improve their interactions with autistic children during a behavioral crisis.

The purpose of this study was to assess the effects of two training methods on improving police officer's behaviors when interacting with autistic children who engage in challenging behavior. The current study evaluates the intensity of training necessary to assist police officers in acquiring the target skills necessary to respond to requests to assist an autistic child during a

behavioral crisis. The effects of two training methods were assessed: didactic training and BST. Researchers collected data on police officers appropriate and inappropriate responses during a simulated crisis scenario utilizing confederates acting a child and caregiver following each training method. This study hypothesized that traditional lecture styles (i.e., didactics) of training that is currently used to train police officers, would not result in mastery of the target skills and that more comprehensive training, such as BST would be necessary to achieve acquisition of the targeted skills.

CHAPTER 2

METHODS

Participants

Participants included three police officers. Blake was a 48-year-old white male who had been a police officer for 23 years. Lisa was a 33-year-old white female who had been a police officer for 12 years. John was a 30-year-old black male who had been a police officer for 5 years (Table 1). Police officers were recruited from a local police department. All participants were required to be active-duty law enforcement officers (i.e., police officer currently employed and serving for a law enforcement agency). Researchers excluded police officers who held a specialist title or leadership position within a first responder department or obtained specialized training on related topics (e.g., developmental delays, neurodevelopment, or were behavioral specialist) from participating in the study.

Confederates

Across all phases of the study, two confederates were present in the study location serving as (a) an autistic child engaging in challenging behavior and (b) a caregiver requesting police officer assistants. All confederates were Registered Behavioral Technicians. The confederate caregiver and confederate child placed an audio device in their ear to receive instruction and feedback from researchers during the sessions. Prior to the sessions, the first author conducted trainings with confederates using BST. Confederates were trained to exhibit consistent behavior (e.g., challenging behavior) across participants and phases of the study.

Child Confederate

The confederate child was trained to engage in challenging behavior including aggression, elopement, disruption, and self-injurious behavior. For the purpose of this study aggression was defined as (a) an open or closed fist or foot coming into contact with another person's body from a distance of 6-in. or greater; (b) throwing an object(s) a distance of 6-in. or greater that lands within 2-ft. of another person; (c) saliva passing the plane of the mouth and landing within 6-in. of another person's body; (d) hand or body contacting another person's body and displacing that person from their original position and; (e) fingers enclosing around another person's body part or clothing.

Elopement was defined as (a) passing the plane of a room without permission or (b) pulling on the door handle to a room without permission.

Disruption was defined as (a) hand(s) or feet coming into contact with a surface from a distance of 6-in. or greater outside of appropriate toy play; (b) sliding an object across a surface or off of a surface for a distance of 6-in. or greater; (c) displacing a piece of furniture by a 45-degree angle or more from its original position; (d) throwing an object(s) a distance of 6-in. or greater that does not land within 2-ft. of another person; (e) foot coming into contact with a surface or object(s) from a distance of 6-in. or greater outside of appropriate toy play and; (f) ripping or tearing an object(s) into two or more pieces or permanently altering the use of an object.

Self-injurious behavior was defined as (a) the child's hand(s) coming into contact with their own head from a distance of 6-in. or greater, (b) the child's head coming into contact with a surface or object(s) from a distance of 6-in. or greater, and (c) the child's teeth coming into contact with and closing down on a portion of their own skin.

Confederate Caregiver

The confederate caregiver was trained to exhibit behaviors of a caregiver experiencing a behavioral crisis with their autistic child. Confederate adults were instructed to engage in the following behaviors: (a) pacing; (b) crying or screaming and; (c) intervening between the police officer and the child. Intervening between the police officer and the child was defined as placing their body directly between the police officer and the child or reaching a hand(s) or arm(s) between the police officer and the child to interrupt any interaction between the two.

Setting

All study appointments were conducted at an autism treatment center located in Southeastern, United States. All baseline and treatment sessions were conducted across two session rooms. Each session room had a one-way observation window for data collection. One of the session rooms was configured to look like a living room and the second was configured to look like a dining room in a house. The living room contained a couch, small chair, coffee table, a lamp, one tabletop decoration (i.e., potted plant), and tangible leisure items (i.e., iPad, paper and crayons, a baby doll, play food items, toy box cars, and blocks). The dining room contained a table and two chairs. The configuration inside of the session rooms remained the same across conditions and participants. The didactic training portion was conducted in a conference room which had a large table, multiple chairs, and a TV.

Data Collection

Researchers collected data via paper and pencil. The data collector, located behind the observation window, recorded whether the participant engaged in each of the targeted 11 appropriate responses and nine inappropriate responses. Targeted appropriate and inappropriate responses were determined based off data collected during a focus group interview conducted

with caregivers who had contacted 911 for behavioral assistance with their autistic child. The focus group evaluated behaviors exhibited by police officers that the family experienced when contacting 911 for assistance during a behavioral crisis (Nuhu, in preparation).

The primary dependent variables were the percentage of target appropriate responses and percentage of inappropriate responding behaviors that occurred during a session. If the participant engaged in a targeted response, the response was recorded as occurred (i.e., yes), or if the participant did not engage in a targeted response by the end of a session, it was recorded as did not occur (i.e., no). The appropriate responding percentage was calculated by dividing the participant's appropriate responses by the number of targeted appropriate responses. The inappropriate responding percentage was calculated by dividing the participant's inappropriate responses by the number of targeted inappropriate responses.

Mastery criteria for the study was met when the participant engaged in 80% or better for targeted appropriate responding and 20% or less for targeted inappropriate responding for three consecutive sessions.

Response Measurement

Appropriate Responding

This study utilized 11 appropriate responses (Appendix A). This study aimed to record 11 appropriate responses that police officers may engage in when interacting with an autistic individual who engages in challenging behavior. Each of the following were considered targeted responses: general appropriate responses were as follows: (a) clearly and verbally stating their name upon arrival to the scenario; (b) stating why they are present; (c) adapting their tone to the situation throughout the entirety of the session (i.e., speaking at or below conversational level); (d) using clear and easy to understand language (e.g., avoiding police jargon) (Nuhu, in

preparation). Appropriate responses directed towards the caregiver were as follows: (a) providing the caregiver with an overview of next steps to aid in de-escalation; (b) asking the caregiver questions to gain insight about the child (e.g., how do you communicate with the child?) and; (c) asking the caregiver what might have triggered the crisis and working to remove any items that might be continuing to increase or maintain the challenging behavior (Nuhu, in preparation).

Targeted appropriate responses towards the child were as follows: (a) letting the child know their next steps; (b) checking the child for any injurious either verbally or physically; (c) meeting the child where they are at (e.g., sitting on the floor, standing if the child is standing, sitting on the couch at a distance) and; (d) providing preferred physical and/or verbal attention or tangibles (i.e., this information should be collected dependent on the verbal report from the caregiver if the participant asked the caregiver questions) (Nuhu, in preparation).

Inappropriate Responding

This study utilized nine targeted inappropriate responses (Appendix B). This study aimed to record nine inappropriate responses that police officers may engage in when interacting with an autistic individual who engages in challenging behavior. Each of the following were considered inappropriate target responses: general inappropriate responses were as follows: (a) using vocalizations beyond a conversational level; (b) using weapons or threat of using weapons (e.g., baton, conducted energy device, gun, projectiles) and; (c) using profane language or language that is not age appropriate for the child (Nuhu, in preparation). Inappropriate responses directed towards the caregiver were as follows: (a) the use of reprimanding statements with the caregiver (e.g., why did you let them do this? Why do you not have control of your child? Why do you have these items in your house if your child breaks things?) and; (b) the use of physical restraints (e.g., handcuffs, joint locks) (Nuhu, in preparation). Inappropriate responses directed

towards the child were as follows: (a) the use of physical restraints (e.g., handcuffs, joint locks); (b) placing demands on the child (e.g., sit down, do not do that, stand up, come in here, move over there, stop engaging in a behavior); (c) using "no" statements in response to the child's behavior (e.g., "no, don't do that,", "no, you can't have that,", "no, don't leave the room."); (d) Reprimanding the child (e.g., "you can't hit,", "why are you doing that?", "Stop doing that,", "you are hurting yourself,", "we don't want to hurt other people.") (Nuhu, in preparation).

Interobserver Agreement

All of the sessions were video, and audio recorded, and a second data collector was present for 42% of sessions to collect interobserver agreement (IOA) data. For Blake, IOA data were collected for 33% of baseline sessions (M = 95%), 40% of didactic training sessions (M = 100%), and 50% of BST sessions (M = 100%). For Lisa, IOA data were collected for 66.7% of baseline sessions (M = 100%), 33.3% of didactic training sessions (M = 100%), and 66.7% of BST sessions (M = 100%). For John, IOA data were collected for 50% of baseline sessions (M = 92.5%; range, 90% - 95%) and 50% of didactic training sessions (M = 95%).

Procedural Integrity

The principal investigator collected procedural integrity data for the confederate child and confederate caregiver across all phases and participants. Procedural integrity data were collected utilizing frequency data collection of each targeted behavior the confederate child and caregiver were instructed to engage in. During each phase of the study the confederate child and confederate caregiver were instructed to engage in specific behaviors and frequency of behaviors.

The confederate child, during the first 5-min of the session, was instructed to engage in (a) 12 instances of aggression; (b) three instances of elopement; (c) six instances of disruption;

(d) three instances of self-injurious behavior. During the second 5-min of the session, the confederate child was instructed to engage in (e) five instances of aggression; (f) one instance of elopement; (g) four instances of disruption; (h) three instances of self-injurious behavior. For Blake, procedural integrity data were collected for 67% of baseline sessions (M = 95.8%; range, 94.4% - 97.2%), 60% of didactic sessions (M = 99.1%; range, 97.2% - 100%), and 100% of BST sessions (M = 98.6%; range, 97.2% - 100%). For Lisa, procedural integrity data were collected for 67% of baseline sessions (M = 100%), 67% of didactic sessions (M = 97.9%; range, 94.4% - 100%), and 100% of BST sessions (M = 100%). For John, procedural integrity data were collected for 75% of baseline sessions (M = 92.6%; range, 55.6% - 97.2%) and 100% of didactic sessions (M = 98.6%; range, 97.2% - 100%).

The confederate caregiver, during the first 5-min of the session, was instructed to (a) intervene between the participant and the confederate child three times; (b) emit eight crying or screaming sounds. During the second 5-min of the session, the confederate caregiver was instructed to (c) intervene between the participant and the confederate child two times; (d) emit five crying or screaming sounds. For Blake, procedural integrity data were collected for 67% of baseline sessions (M = 91.7%; range, 88.9% - 94.4%), 60% of didactic sessions (M = 94.4%; range, 83.3% - 100%), and 100% of BST sessions (M = 94.4%; range, 88.9% - 100%). For Lisa, procedural integrity data were collected for 67% of baseline sessions (M = 100%), 67% of didactic sessions (M = 95.8%; range, 88.9% - 100%), and 100% of BST sessions (M = 96.3%; range, 88.9% - 100%) and 100% of didactic sessions (M = 96.3%; range, 88.9% - 100%) and 100% of didactic sessions (M = 100%).

Social Validity

Following completion of the study, a feasibility questionnaire was provided to police officer participants. The questionnaire consisted of six questions pertaining to participant's perception of the feasibility and acceptability of the study (Appendix C).

Procedures

A concurrent multiple baseline design was used to evaluate the effects of the training methods on skill acquisition. During each session, the participant was provided with a crisis scenario created to resemble a 911 dispatch. The 911 call read, "There is a domestic dispute between mother and child. Be advised that one of the subjects is an autistic child." Prior to entering the session rooms, participants did not receive any additional information regarding the crisis scenario. Sessions ended either upon the participant reaching successful completion of deescalation or when 10-min elapsed. Successful de-escalation of the crisis scenario was defined as the participant engaging in all targeted appropriate responses.

Baseline

Before entering the session room, the primary researcher provided the participant with the 911 crisis scenario typed onto a piece of paper. After reviewing the 911 call the police officer was instructed to engage in behaviors as they normally would upon arriving to a residence with the provided dispatch and use previous knowledge and de-escalation tactics to de-escalate the crisis scenario. No feedback or instruction was provided to the participant during or after sessions.

Didactic Training

Following baseline, each participant attended a didactic training that was conducted in a separate conference room. Didactic training was presented by the primary investigator. This training reviewed a PowerPoint presentation created by the first author (Appendix D). The didactic training PowerPoint presentation was based off a training regularly provided to police officers in the community (Neurodevelopmental Disabilities Adolescents, Youth, and Adults [PowerPoint Slides], 2019). The didactic training utilized during this study was intended to mimic current training methods being utilized in the community. The didactics training lasted approximately 1-hr. in duration for each participant. The same presentation was used across all participants and consisted of a brief review of neurodevelopmental disabilities and mental illness, effective communication strategies for the target population, and additional resources available in the community. Following the didactic training the primary investigator led the participant back to the session rooms to conduct sessions. The same crisis scenario and 911 call as in baseline were provided to the participant to review again. During the sessions, no feedback was provided to the police officer.

Behavior Skills Training

Researchers implemented BST with participants who did not meet mastery criteria following the didactic training. BST was implemented by the primary investigator utilizing a script (Appendix E). During the didactics component of BST, the primary investigator, introduced the training by stating "You will now learn about some ways to effectively work to de-escalate a child and caregiver who are experiencing a behavioral crisis." The primary investigator began by briefly reviewing the purpose and techniques of de-escalation when working with an autistic child during a behavioral crisis. The primary investigator discussed

reasons why behavior might occur and how the behavior of others within the environment can cause the child's behavior to increase or decrease.

During the modeling component of BST, the primary investigator modeled de-escalation techniques to participants using the target appropriate and inappropriate behaviors with a confederate child and confederate caregiver. The primary investigator acted as the police officer during the modeling component of BST while the participant was instructed to observe.

During the role-play and feedback component of BST, the participant was asked to role-play the de-escalating strategies with a confederate child and confederate caregiver utilizing the same crisis scenario utilized during the sessions. The primary investigator provided feedback during and following role-plays. Feedback was immediately provided following any instances of targeted inappropriate responding. BST sessions were conducted until the participant engaged in three consecutive role-play sessions at 100% targeted appropriate responding and no inappropriate responding. Following the training components of BST, the sessions were conducted the same as in baseline and didactic training, and no feedback was provided to the participant after the sessions.

CHAPTER 3

RESULTS

Figure 1 depicts results for Blake, Lisa, and John. Blake (top panel) engaged in moderate levels of appropriate responding (M =70%; range, 54.5% - 81.8%) and elevated levels of inappropriate responding (M =27.27%) during baseline. Blake initially engaged in increased levels of appropriate responding during the sessions following the didactic training. However, levels of appropriate responding decreased to baseline levels after three sessions (M =78.2%; range, 63.6% - 90.9%). Levels of inappropriate responding were variable but elevated following the didactic training (M =23.6%; range, 18.2% - 27.3%). Following didactic training, researchers implemented BST with Blake to determine its effects on appropriate and inappropriate responding. Following BST, Blake demonstrated high levels of appropriate responding (M =95.5%; range, 90.9% - 100%) and low levels of inappropriate responding (M =0%). Blake did not meet master criteria during the current study due to dropping out of the study prior to completion, but Blake did demonstrate the lowest levels of inappropriate responding and the highest levels of appropriate responding following the implementation of BST.

Lisa (middle panel) engaged in lower levels of appropriate responding (M =54.5%; range, 45.5% - 63.6%) and moderate levels of inappropriate responding (M =27.3%) during baseline. Lisa initially engaged in increased levels of appropriate responding during the sessions following the didactic training. However, levels of appropriate responding decreased to baseline levels after two sessions (M =27.3%). Levels of inappropriate responding were consistent with baseline measures following the didactic training (M =24.2%; range, 18.2% - 27.3%). Following didactic

training, researchers implemented BST with Lisa to determine its effects on appropriate and inappropriate responding. Following BST, Lisa demonstrated elevated levels of appropriate responding (M = 100%) and low levels of inappropriate responding (M = 0%). Lisa met mastery criteria for the study following the BST phase.

John (bottom panel) engaged in lower levels of appropriate responding (M =40.9%; range, 36.4% - 45.4%) and increased levels of inappropriate responding (M = 36.4%; range, 27.3% - 45.4%) during baseline. John demonstrated increased levels of appropriate responding during the sessions following the didactic training (M =72.7%). Levels of inappropriate responding were consistent with baseline measures following the didactic training (M =40.9%; range, 36.4% - 45.5%). These were all of the sessions and trainings conducted with John. He was unable to attend more sessions and trainings due to his work schedule.

Social Validity Results

Blake and Lisa completed the feasibility questionnaire following their participation in the study. Lisa endorsed the didactic training an 8 out of 10 but for the study's feasibility, but BST a 10 out of 10; whereas Blake endorsed the didactic training an 8 out of 9, and but BST as a 10 out of 10. Both Blake and Lisa stated that the BST component was the most impactful to them, as it allowed them to actively practice the skills being taught and receive in vivo feedback. Lisa stated on her questionnaire: "The BST component significantly enhanced my understanding and execution of the best practices for engaging with autistic juveniles." Although both participants rated it easy to attend study appointments, both also stated time constraints as a notable challenge to attending study appointments while also maintaining all aspects of their job duties. Both participants indicated they would recommend this training to others within their department.

CHAPTER 4

DISCUSSION

The current study evaluated two methods of training to assess their effectiveness at improving police officers' interactions when dispatched by 911 to a call involving an autistic child who is experiencing a behavioral crisis. One participant, Lisa, met mastery criteria during the BST phase with 100% appropriate responding and 0% inappropriate responding across three sessions. A second participant, Blake, approached mastery with high levels of appropriate responding and zero levels of inappropriate responding across two sessions. The final participant, John, dropped out of the study during the didactics training phase.

The didactic training phase of the current study was designed to emulate the current training strategies being utilized in the community to prepare police officers to interact with autistic individuals. The training only highlighted what is currently being taught to police officers in the community about interacting with autistic individuals, not what that targeted appropriate behaviors (Nuhu, in preparation), for the current study were. The outcomes of the current study provided initial evidence that didactic training (i.e., current police officer training methods) is ineffective at sustaining high levels of targeted appropriate responding. During the didactic training phase both Blake and Lisa demonstrated a decrease in appropriate responding across sessions after exhibiting high levels of appropriate responding during their initial sessions. For example, Blake engaged in 91% appropriate responding during the sessions conducted immediately following didactic training but demonstrated a 27% decrease in the sessions conducted 14 days after completing the didactic training. Nevertheless, following didactic

training both Blake and Lisa, who demonstrated moderate levels of appropriate responding, did not meet mastery criteria, and required BST. These outcomes indicated the current model of training is insufficient to train police officers in effective strategies when interacting with an autistic individual.

Participants in the study met or approached mastery criteria during the BST phase of the study, suggesting that BST could be an effective method for training police officers to enhance interactions when engaging with an autistic individual. For example, the sessions with Lisa conducted 21 days post BST training, demonstrated continued high levels of appropriate responding, at 100%. Deslauriers et al. (2019) states that instruction utilizing role play and feedback increases understanding and maintaining of materials more than a traditional lecture style of instruction such as that provided in the didactics phase of the current study. Research provides strong evidenced that BST and in vivo feedback aid in skill mastery and maintenance (Parsons et al., 2012). Furthermore, the outcomes of the current study indicate that utilizing BST to train police officers to engage with an autistic child could potentially aid in enhancing interactions between a police officer and autistic children, but further evaluation is needed.

Limitations and Future Directions

A limitation of this study is the validity of the outcomes given confederates were used to represent a caregiver and child during a behavioral crisis. During a time of crisis, the body undergoes differing automatic phycological processes (e.g., increased heart rate, respirations, and blood pressure; Baldwin et al., 2019), that influence individual's behaviors. When an autistic child is experiencing a behavioral crisis, caregivers and other family members are more likely to attend specifically to the child and are less likely to exhibit behaviors that assist police officers (e.g., complying to request for information). It is very likely the stimulated crisis scenario did not

accurately mimic behavioral crises occurring in the community setting as a result responding exhibited by participants lack validity. Given this limitation, it is imperative additional research is conducted to better evaluate how caregivers respond in the community to better inform procedures for future studies. One solution to this limitation is to conduct a focus group with caregivers who have autistic children whom engage in challenging behavior and have needed to contact 911 for behavioral assistance. This focus group could examine how the caregiver perceived the behaviors exhibited by the police officer during the interaction. Although the results of a focus group such as this could be slightly biased, this would provide researchers with better insight on a real-life crisis scenario versus a stimulated one. In addition, future studies should conduct the sessions in the community to better account for the unpredictable variables that impact police officers' behaviors when responding to community requests for assistance. A further limitation to the validity of the outcomes of the current study is that procedural integrity data was not collected on the researcher's implementation of didactic training or BST with either participants or confederates. Furthermore, the validity of the outcomes of the current study could have been impacted due to the fact that procedural integrity data was not collected on the implementation of didactic training or BST with either the participants or confederates. Future researchers should collect procedural integrity data on the implementation of trainings with both the participants and confederates to ensure consistency across phases and participants.

A second limitation to this study is the duration of time between the training components and the sessions. Appointments duration during this study were 2-hrs. maximum and only the sessions that could fit into those 2-hrs. were conducted. Longer spans of time between training components and the sessions should be factored into future studies. Future researchers should include a set minimum duration between the sessions. For example, once a participant has

engaged in a training component the researcher could conduct an initial set of sessions but then wait a predetermined number of days or weeks (e.g., 30 days) to conduct another set of sessions to determine the maintenance of skills attained. This study utilizes three sessions at 80% targeted appropriate responses as mastery, a future study could utilize an 80% mastery for targeted appropriate responses on both 30- and 60-days post training. Factoring for additional time between the sessions is both a future direction for other researchers as well to assess maintenance of the findings from the current study.

A final limitation to this study is the poor completion rates for participants due to the sample size. Only one participant completed the study by meeting mastery criteria during the BST condition. Two out of three of the participants stopped their participation in the study prior to meeting criteria. One explanation for their dropout includes difficulty with scheduling study appointments for them to attend at an offsite facility that might be a far distance from their home-base police department. The population assessed during this study serves their community and is typically unable to leave their department short staffed during working hours to travel far distances to participate in a research study. Outcomes from the feasibility survey indicated this as a barrier to participating in the current study. Results of the feasibility survey showed that two participants stated that attending study appointments while also maintaining their daily job duties was a challenge for them. Results also showed that though the didactics component would be beneficial as a refresher during annual training, incorporating the BST component into police officers recruit training would be a more beneficial place to begin. Future studies regarding this topic could aim to partner with police departments to conduct BST at the department versus at an offsite facility as part of the officer's recruit training or during scheduled annual trainings.

Scheduling this training during an officer's designated training time would make it more accessible to participants.

As a future direction for utilizing BST to train first responders, components of this study could also be utilized in training other sectors (e.g., 911 operators, fire fighters, emergency medical technicians) to engage with autistic children who engage in challenging behavior. Danielle Wallace et al. (2020) suggests that people who contact 911 for assistance could aid in better preparing police officers about whom they are responding to before arriving to the person's location. One approach to preparing the officers would be to have the 911 operator ask the person making the 911 call report any relevant information to the 911 operator, and the operator would be able to reiterate the information to the responding officer before they arrive. A separate training and questionnaire could be provided to 911 operators with questions such as; (a) what does your child like and dislike? (b) is there anything important we need to tell the responding officer regarding your child? (c) is your child verbal? (d) do you have any suggestions to give this officer regarding interacting with your child? This type of examination would extend the findings of the current study into other fields of first responders and provide further insight into best practices for caregivers experiencing a crisis and needing to contact first responders for assistance. Results of these components generalizing to other fields within the first-responder community would need to be further evaluated to ensure results would be positively maintained across fields.

In conclusion, results of this study added pertinent information regarding how we can better train police officers to interact with autistic children who engage in challenging behavior.

Outcomes provided initial evidence that didactic training alone is insufficient in helping police officers develop and maintain the skills necessary to effectively interact with an autistic child

during a behavioral crisis. Furthermore, data suggest that BST might be an effective way to train police officers. While further evaluation of the maintenance of the skills and knowledge obtained from BST needs to be evaluated, evidence suggest that BST could potentially be a viable option for enhancing interactions between police officers and autistic children who engage in challenging behavior.

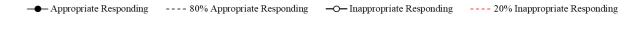
Table 1Participant's Demographics

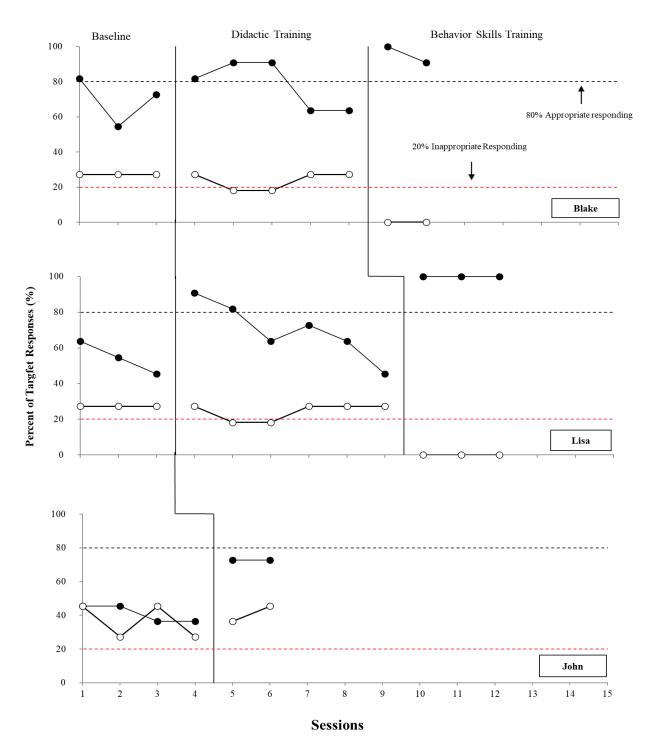
Participant Demographic Characteristics

Participant Demographic Characteristics	Number	Percentage
Double in conta		reiceiliage
Participants	3	
Mean Age	37	
Mean Duration of Service	13.33	
Gender		
Male	2	66.66
Female	1	33.33
Race		
White	2	66.67
Black	1	33.33
Rank Within Department		
Police Officer	2	66.66
Lieutenant	1	33.33
Interacted with Autism in the Field		
Yes	3	100
No	0	0

Figure 1

Rate of Police Officers' Target Responses





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Appendices A

Target Appropriate Responses Data Collection Sheet

Appropriate Responding		
Clearly and verbally stating their name upon arrival	Y / N	
Stating why they are present	Y / N	
Adapting tone to the situation throughout entire session • Neutral/conversational level	Y / N	
Clear and easy to understand language (i.e., no police jargon)	Y / N	
Give parent overview of next steps in de-escalation	Y / N	
Ask caregiver questions to gain insight about the child: • What are the child's preferences? • Modality of communication • Previously used de-escalation strategies?	Y / N	
Speaking with the caregiver about removing any triggering items that might have caused or being maintaining the child's behavior	Y / N	
Letting the child know their next steps	Y / N	
Checking the child for any injurious either verbally or physically • Asking child if they are okay • Physically checking for bleeding/injuries	Y / N	
 Meeting the child where they are at Sit on the floor Standing On the couch at a distance 	Y / N	
Providing preferred physical and/or verbal attention or tangibles • This would depend on report from the caregiver if the officer asked or engaging in items the child is currently playing with/are available	Y / N	
Score:	/11 % appropriate responding	

Appendices B

Target Inappropriate Responses Data Collection Sheet

Inappropriate Responding		
Not adapting vocalizations		
 Demanding tone of voice 	Y / N	
Above conversational level		
Using weapons/threat of weapons		
• Baton		
Conducted energy device	Y / N	
• Gun		
 Projectiles 		
Using profane language		
 The use of curse words or language that is not 	Y / N	
age appropriate for the child		
Using reprimanding statements with the caregiver		
Why did you let them do this?	Y / N	
 Do you not have control of your child? 	1 / 1	
Why do you have these items in your house?		
Using restraints with the caregiver		
 Handcuffs 	Y / N	
 Physical restraints (i.e., joint locks) 		
Using restraints on the child		
 Handcuffs 	Y / N	
 Physical restraints (i.e., joint locks) 		
Placing demands on the child		
 Don't do this 		
• Sit down	Y / N	
Stand up	1 / N	
 Move over there 		
 Stop talking/(agg)/(SIB)/(DIS) 		
Using "no" statements in response to the child's		
behavior		
"No don't do that"	Y / N	
"No, you cant have that"		
 "No, don't leave the room" 		
Reprimanding the child		
• "You can't hit"		
• "Why are you doing that?"	V / NI	
 "Stop doing that" 	Y / N	
 "You are hurting yourself" 		
"we don't want to hurt ourselves"		
	/9	
Score:	% inappropriate responding	

Appendices C

Feasibility Questionnaire

- 1. On a scale of 1-10 with 1 being the worst and 10 being the best how would you rate each training component you experienced during the study? Not all participants experienced each component, only rate the components that you experienced.
 - i. Didactics training (the short power point review and discussion):
 - ii. Behavioral skills training (the instruction, modeling, roleplay, and feedback component):
 - iii. Caregiver training (the caregiver provided you information and led the interaction):
- 2. Were the components of the training that you experienced helpful? If yes, please describe how these would help you in current role, if no, please describe how the training could be adapted to better assist police officers.

i.

- 3. If your department were to offer a training like one of these, please describe how feasible you felt the components where that you experienced.
 - i. Didactics:
 - ii. Behavioral skills training:
 - iii. Caregiver training:
- 4. If you were unable to complete the study, please list any barriers that impacted your ability to participate. This will help us shape future training components.

i.

	1.
5.	How easy was it for you to fit the study appointments into your schedule?
	☐ Very easy
	□ Easy
	☐ Neutral
	☐ Difficult
	☐ Very difficult
6.	Would you recommend this training to others
	□ Yes
	\square No

Appendices D

Didactic Training Presentation

Slide 1

Neurodevelopmental Disabilities

First Responder Training

Slide 2

Objectives

- Describe neurodevelopmental disabilities.
- Explain the differences between neurodevelopmental disability and mental illness.
- Discuss effective communications strategies a first responder can employ when in contact with a person with neurodevelopmental disabilities.
- Discuss tips for engaging a person with neurodevelopmental disabilities.
- Discuss the Georgia Crisis Response System related to those with neurodevelopmental disabilities.

Slide 3

What is a Neurodevelopmental Disability?

Slide 4

What is a Neurodevelopmental Disability?

- Neurodevelopmental disabilities are a group of conditions due to an impairment in physical, learning, language, or behavior areas.
- Must be diagnosed by age 22.
- Deficit Areas Must have 3 or more areas:
 - Self-care
 - Receptive and expressive language

 - LearningMobility
- Capacity for independent living
 Economic self-sufficiency

Slide 5

Differences Between:

Neurodevelopmental Disabilities • Lifelong disability.

- Lacks understanding of appropriate behavior.
- Difficulty with reasoning skills.
- Appears physically more mature than their behavior.

Mental Illness

- Has nothing to do with intelligence/IQ.
- May be improved or controlled with medication.
- May occur at any age.

Slide 6

Commonly Known Neurodevelopmental Disabilities

- Specific Learning Disorder.
- · Autism Spectrum Disorder.
- Attention-Deficit/Hyperactivity Disorder (ADHD).
- Intellectual Disability.

Slide 7

Specific Learning Disorder

- Difficulties learning and using academic skills.
- \bullet Difficulties in reading and understanding what was read.
- · Difficulties with arithmetic and mathematical reasoning.
- · Academic skills below the norm, can cause significant impairment.

Slide 8

Autism Spectrum Disorder

- Persistent deficits in social communication and social interaction.
- · Difficulties with conversations.
- $\bullet \ {\rm Difficulties} \ with \ nonverbal \ communications.$
- $\bullet \ {\rm Difficulties} \ in \ understanding \ relationships.$

Slide 9

Attention-Deficit/Hyperactivity Disorder Inattention (5+ symptoms) Often unable to play or be in leisure activities quietly esn't listen when spoken to directly

Slide 10

Intellectual Disability

- Ranges from mild to profound.
- IQ <70.
- Males are more likely than females to be diagnosed.
- Impairments are life-long.
- Difficulties with daily living skills.

Slide 11

Individuals with Neurodevelopmental Disabilities

- Are typically the victims of crime.
- \bullet 5-10 times more likely to be victims of crime than the general public.
- \bullet Most victimization by family members or trusted caregivers.
- These crimes are often not reported or prosecuted.

Slide 12

As Victims

- May be easily and targeted for victimization.
- Be less likely or able to report what occurred.
- Think that the harsh treatment is normal.
- Believe the perpetrator is a "friend".
- Unaware of the seriousness of the situation.

Slide 13

As Suspects

- May not want anyone to know they have a disability.
- May pretend they understand their rights when asked.
- Not able to respond to instructions given.
- \bullet Respond to what they think the person wants to hear.
- Unable to describe what occurred.
- Seems confused about what has happened and confess.
- \bullet Easily agitated and try to get away.

Slide 14

Communication Strategies

- Speak directly to the person.
- Address them by their name.
- Avoid leading questions.
- · Ask them to tell you what happened.

Slide 15

Steps for Interaction

- Be patient.
- Give space.
- Maintain calm demeanor.
- \bullet Reassure the person.
- Use simple sentences.
- \bullet One question at a time.
- Give plenty of time. Avoid quick movements.
- Minimize sensory overload.

Slide 16

Questions???

Appendices E

Behavior Skills Training Script

Didactic Instruction

Read the following to the police officer:

"We will now teach you about some ways to effectively work to de-escalate a child and caregiver who are experiencing a behavioral crisis. De-escalation is the number one strategy that you should be using when responding to a call that involves a child diagnosed with a neurodevelopmental disability. De-escalation is an approach to conflict resolution in which your behavior is intended to prevent any further escalation of the behavioral crisis. It uses techniques that are aimed at reducing challenging behavior that the child is engaging in. These techniques include a combination of verbal and non-verbal communication that are not authoritative, less controlling, and less confrontational. Typically, de-escalation is a last resort option, because it allows the child access to items or escape from having to do something, but seeing as in the caregiver as called you for help, then de-escalation would be the best tactic for you to use to gain control of the scenario."

"There are a few things that are important to remember when attempting to de-escalate a crisis with an autistic child. Avoid asking questions, placing demands, or responding to the child's challenging behavior. All behavior has a "motive," or a reason, therefore some children engage in behavior to receive attention, so you, the caregiver, a bystander, commenting on the behavior such as "no, don't hit," or "stop running away," can potentially cause behaviors to escalate or continue. If a child engages in escape-maintained behavior or engages in a behavior to get out of doing something else, then someone placing a demand such as "sit down," or "come over here," can cause behaviors to escalate or continue occurring. Also, children with a neurodevelopmental disorder might lack the ability to understand appropriate behavior versus inappropriate behavior and might not understand that the behavior they are exhibiting is inappropriate or might have difficult with reasoning skills as to why they should not be engaging in specific behaviors that are deemed inappropriate or challenging."

"First, we will show you what it would look like to appropriately de-escalate a crisis scenario with a child who engages in challenging behavior and then we will give you a chance to practice and receive some feedback. One RBT act as the child who engages in challenging behavior and is experiencing a behavioral crisis and another RBT will act as the caregiver of the child."

Modeling

The trainer RBT will act as the police officer responding the behavioral dispatch. The confederate caregiver will engage in crying/screaming, pacing, and trying to intervene between the RBT and the confederate child as outline during sessions. The confederate child will engage in aggression, disruption, self-injurious behavior, and elopement as outlined during sessions.

Steps to follow during modeling:

Ensure to keep a neutral and conversation tone throughout the entire session and use easy to understand language (i.e., no ABA jargon)

- 1. The trainer RBT will enter the room by knocking and immediately stating their name and why they are present.
- 2. If the child is engaging in challenging behavior, ignore the behavior/ensure safety of the child, caregiver, and themselves
- 3. Speak with the caregiver about:
 - What caused the behavior?
 - How often does it occur?
 - What are the child's preferences (i.e., like/not like)?
 - What is the child's modality of communication?
 - How do you usually de-escalate?
- 4. After receiving some information about the child, the trainer RBT will give the parent an overview of what their next steps are in de-escalation (i.e., removing triggering items, get on the child's level, and speak to them or engage in the activity they are currently engaging in).
- 5. The trainer RBT then will engage with the child by:
 - meeting them where they are at
 - avoiding questions/demands
 - providing preferred items/attention

Checking for injuries: When deemed appropriate during the scenario, the trainer will either physically check the child for injuries or verbally ask the child or caregiver if they were/are injured.

• If the child or caregiver states "yes" they are injured, or if physical injuries are seen, then trainer should ask the caregiver if they would like to request medical assistance or if there is something the trainer can do to help.

Discussion with the police officer participant following role play:

When the child engages in behavior: "when the RBT engaged in challenging behavior, I ignored it, I did not say anything, or comment on the behavior, instead I am working with the caregiver to find a preferred item or activity to redirect the child to. This aids in decreasing the possibility of the child's behaviors increasing because they are no longer receiving the desired reaction from the behavior."

Gathering information: "Once I had gathered some information from the caregiver, I was better able to understand what the child preferences and what might be causing the behavior. I tried to remove any potential causes of the behavior by not placing demands, allowing the child access to

preferred items, and using any other information such as preferred types of attention or ways to communicate with the child. This allowed me to tailor my interaction with the child to their specific needs."

Final step: Ask the police officer if they have any questions about appropriate responding and de-escalation tactics before proceeding to roleplay.

Roleplay

The confederate RBTs continue to serve as the child and caregiver experiencing a behavioral crisis. The child will engage in aggression, disruption, elopement, and self-injurious behavior as while the caregiver paces, cries, and attempts to intervene as outlined in sessions.

Successful de-escalation:

• Following a trial with all 11 appropriate responses from the police officer the trainer RBT will provide descriptive praise (e.g., "great job," "I love how you _____," "great job ignoring the challenging behavior and focusing on de-escalation.")

Feedback

Contingent on the commission or omission of responding errors, the trainer will stop the role play and immediately provide corrective feedback as follows:

Not gathering information from the caregiver:

• "Remember, we want to gather some information from the caregiver about the child so that we can better tailor our interactions to their specific needs."

Placing demands on the child:

• "Remember a child might engage in challenging behavior in order to escape from doing something, therefore placing a demand can cause behavior to escalate."

Commenting on the child's behavior:

• "Remember, we want to ignore the child's behaviors, they might be looking for a specific response from you when they engage in behavior, therefore you eliminate that desire by not responding to the behavior."

Not letting the child or caregiver know what they are doing:

- "Remember we want to let the child/caregiver know who we are and what we are doing. The caregiver is also experiencing a crisis; therefore, you want to reassure them as to what is happening or going to happen."
- "Remember a child with a neurodevelopmental disorder might not understand verbal or nonverbal social ques and might be nervous, we want to clearly and verbally state what we are doing so that they understand as well."

Using inappropriate language/jargon/above conversational level voice:

• "I know this is a stressful situation for you, but it is also stressful for the caregiver and child who are experiencing the crisis. We want to remember to keep a calm and conversational level tone of voice when speaking to either the caregiver or child."

• "The caregiver and child more than likely do not understand your police jargon. Just as I am sure it is difficult for you to understand our ABA jargon. Remember to use language that the people you are assisting will understand."

Not checking for injuries:

• "The child is engaging in some pretty intense challenging behavior, which is why the caregiver called you for assistance." Bring up an example of a behavior the child engaged in during session and discuss why the police officer should be checking the child or caregiver for injuries either verbally or physical.

Following the error correction, the trainer RBT will restart the role play session.

How BST concludes:

• The police officer engages in all 11 appropriate responses and 0 inappropriate responses for 3 consecutive sessions.