Parent Implemented Intervention: Preliminary Analysis of Parent Training as Part of Parent Reunification with a Child in Foster Care

Katherine Wheeler, PhD, BCBA, LSSP

University of Cincinatti

Jennifer Hamrick, PhD, BCBA-D

Texas Tech University

Kate Pennington

Texas Tech University

Daniel P. Kelly, Ed.D., DTE

North Carolina State University

Amanda Hampton, M.Ed., BCBA, LSSP

Texas Tech University

Jennifer Hixson, PsyD, BCBA, LSSP

Texas Tech University

Abstract

Children with developmental disabilities are often at higher risk for abuse and neglect and are overrepresented in the child welfare system. Reunification is often considered as a primary outcome goal when children are placed in foster care. During the reunification process, various support services are offered for families. Given applied behavior analysis (ABA) is an evidence-based service for autistic children and frequently includes parent training as a vital service option for families, including ABA as a therapeutic option for families within the reunification process should be considered a viable option. This study investigated the effects of ABA-based parent-implemented intervention on the skill acquisition of one mother-child dyad in the reunification process. These findings are a preliminary analysis of findings from intervention when working in collaboration with Child Protective Services and a family as part of the parent-child reunification process for a family with a child with autism spectrum disorder. Initial findings indicate a significant increase in the mother's ability to implement interventions to address the child's behavior with a decrease in behaviors of concern correlated with parent intervention.

Keywords: autism, parent implemented intervention, foster care

Introduction

Children with autism spectrum disorder (ASD) have been known to demonstrate behaviors of concern that can impact learning for themselves and those in the family circle (American Psychiatric Association [APA], 2022). Parent implemented intervention is a promising therapeutic approach to increase behavioral skills in both the parent and the child (Garikipati et al., 2024; Meadan et al., 2016). Behavioral skills training to teach parents various skills has been demonstrated as an effective approach in the increased parent implementation of a multitude of behavioral procedures, including differential reinforcement, prompting

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procedures, and social skills (Conklin & Wallace, 2019; Dogan, et al., 2017; Drifke et al., 2017).

There is a general dearth in the academic literature regarding children with disabilities and their interaction with the child welfare system. This paucity only deepens when specific disabilities are examined. This is due, in part, to a lack of reporting and the accuracy of that reporting, large variations between states that limit national characterizations, and a lack of focused research in this area. Due to this lack of academic literature addressing the efficacy of supports for individuals with ASD within the child welfare system, the current study sought to identify the impact of parent training using behavioral skills training to implement social skills training with a child with ASD who was in the reunification process via the child welfare system.

Foster Care and Autism

The connection between ASD and placement in foster care is unclear. Although much of the literature related to children with disabilities and foster care asserts that such children are overrepresented in child abuse cases (e.g., Bilaver & Havlicek, 2013; Cidav et al., 2018; Lightfoot et al., 2011), there are substantial issues with the data used to make this assertion, including varied definitions of disability, the causes of the disability, and the method by which disability status is determined. For example, many of the studies connecting disability status to foster care use medical billing codes that, although often linked to diagnosis, alone only report that a patient was seen for symptoms related to a diagnosis and require contextual notes to determine disability status (see Hall-Lande et al., 2015; Lightfoot et al., 2011).

Disability Status in Foster Care

In several studies, it is unclear which is the antecedent condition (abuse/neglect or the disability) or if a causal link exists between disability status and the causes for removal from the home (e.g., Dion et al., 2024). In some cases (e.g., Cidav et al., 2018; Lightfoot et al., 2011), billing codes related to depression, anxiety, and post-traumatic stress disorder (PTSD) were classified as disabilities that potentially support the claim that "Children with disabilities are overrepresented in the child welfare system," (Cidav et al., 2018, p. 176). However, in these cases, both abuse or neglect and the removal from the home can represent etiologic factors for conditions such as depression and anxiety (Zhou et al., 2019) and these traumas are salient to conditions such as PTSD. Further, to be termed a disability, a person must have a "physical or mental impairment that substantially limits one or more major life activity" (Americans with Disabilities Act, 2008). As a person can exhibit symptoms of depression or anxiety without those symptoms limiting major life activities, the mere existence of a symptom is not indicative of a disability.

Prevalence Rates

When foster care, or abuse and neglect, is examined in the context of children with ASD, there are even fewer studies that shed light on the interaction of foster care and autism. Notably, what little research exists tends to indicate that ASD rates among foster youth do not align with general disability diagnoses or with the prevalence of ASD among the general population. For example, some of the incongruence in ASD rates can be attributed to the age of the research and the steady rise in ASD prevalence in the general population over the past few decades. In 2000, the prevalence of ASD was 6.7 per 1,000 children and increased to 27.6 per 1,000 in 2024 (Centers for Disease Control and Prevention; CDC, n.d.). For this reason, the rates of ASD in foster youth for any study must be compared to the prevalence in the general population at the time of data collection. For example, Civad et al. (2018) used data from the Medicaid records of children in Minnesota and found that between 2001 and 2007, the rate of ASD prevalence averaged 5 per 1,000 Medicaid enrolled children not in foster care which is below the CDC reported average over a similar time period of 8.32 per 1,000. This 3.32 per 1,000 difference can be explained by natural variance or by differences in socioeconomic status which may account for Medicaid eligible children being diagnosed with ASD less often than their wealthier peers (Thomas et al., 2012). Further, Shea et al. (2024), through reviewing 2016 data across the US, found that children on the autism spectrum (with or without co-occurring intellectual disabilities) were represented in foster care at 2 to 5 times the rates found in the general population in the US, and these researchers indicated that their findings demonstrate an overrepresentation of youth with intellectual and developmental disabilities within the foster care system.

Other studies that included ASD in their analysis of either foster care or abuse/neglect cases – the leading reasons for a child to be placed in foster care – reported significantly different prevalence rates than Civad et al. (2018). For example, Maclean et al. (2017), which isolated ASD in their analysis, found

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that between 1990 and 2010, 0.73% of maltreatment allegations and 1.00% of children placed in foster care were diagnosed with ASD. This is not only in line with or lower than the prevalence of ASD within the general population, but the researchers concluded that children with ASD were at lower risk than children without disabilities, although it should be noted that this study took place in Australia. In contrast, McDonnell et al. (2019) concluded (using data from 2000 – 2016 from South Carolina) that children with ASD were at greater risk for more frequent and complex maltreatment with children diagnosed with ASD only being 1.51 times more likely to have a substantiated report of maltreatment and 1.97 times more likely if diagnosed with ASD and another intellectual disability. Bilaver and Havlicek (2013) analyzed Medicaid data from Illinois and found that 2.4% of children entering foster care or other out-of-home placement had a diagnosis of ASD. At the time of this study, only 1.1% of the total US population had a diagnosis of ASD, indicating a possible overrepresentation of ASD in the foster care system.

Overall, the few studies that exist empirically examining ASD and foster care or maltreatment do not comport with the prevalence rates of ASD in the general population or between the studies themselves. This indicates a clear need for further study into the relationship between child welfare and ASD, but it is also important that the directionality of the relationship be understood. Some research suggests that children with behavior and communication deficits may be at even greater risk for prolonged maltreatment as recognition of signs of abuse are often masked by characteristics related to intellectual and behavioral disabilities (Bilaver & Havlicek, 2013; Dion et al., 2024). The number of children placed into child welfare services due to a caregivers' inability or lack of resources in meeting complex needs is also increasing over time (Azzopardi et al., 2022).

Needs of Autistic Children in Foster Care

Although the rates of out-of-home placement and maltreatment are alarming, other complex issues exist for these children once they are placed in foster care. A report produced by The Stephen Group (2015), aimed at identifying areas of improvement related to specialized care within the Texas Child Welfare System, identified a lack of clear standards, accountability, and training on the part of the child welfare system and affiliated parties as significant shortcomings in properly caring for children with special needs. Because of mismanaged care and lack of resources, foster children with disabilities are often provided with the same level of care and resources as children without disabilities. Their *Assessment Findings* report (April 2014) revealed that CPS caseworkers spent a substantially limited amount of time directly engaging with children and families due to excessive administrative burdens, redundant policies, and inefficient workflows. High staff turnover further strains the system, reducing the quality of care and increasing caseload burdens. The report also highlighted delays in closing investigations, inconsistent decision-making processes, and a culture of compliance that prioritized meeting procedural requirements in lieu of achieving meaningful outcomes for children and families, indicating a need for systemic changes but also a range of supportive interventions that can impact said meaningful outcomes. The Stephen Group's (2015) report further outlines a specific need for better parent and caregiver training in managing the needs of these children, expanded in-home and local treatment options, and greater continuity of care across service providers involved with the child. Due to the nature of managed care within foster care, foster children often have more limited access to psychosocial or behavioral interventions and are more likely to simply be placed on psychotropic medications as a first-line treatment (Barnett & Zayas, 2018; Vanderwerker et al., 2014).

Parent Training and Parent Implemented Intervention(s) in ABA

ABA is a scientific approach to understanding and improving socially significant behavior through the application of behavioral principles (Cooper et al., 2020; Gitimoghaddam et al., 2022). ABA-based interventions are widely used in educational and clinical settings to support skill development and behavior change (Gitimoghaddam et al., 2022). In this study, we examine parent-training interventions during reunification within an ABA framework, as it is well understood in the behavior analytic community that trained behavioral skills acquired by individuals with ASD during the therapeutic process do not always generalize to the home setting and do not maintain in follow-up assessments. One solution to this generalization and maintenance of these skills has been to provide parent training to promote parent implementation of behavioral strategies.

Several studies have evaluated behavioral procedures for teaching parents the skills to manage their child's behaviors of concern (Heiman et al., 2024; Lequila et al., 2013; Sawyer et al., 2016). These strategies, called behavioral skills training, typically involve describing behavioral procedures (instruct), modeling the procedures (model), having parents complete role-play scenarios (rehearsal), and providing corrective

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feedback (feedback; Schaefer & Andzik, 2020). Most of the academic research on parent training focuses on consequence-based interventions such as the implementation of differential reinforcement, prompting strategies, extinction, and time out (Heiman et al., 2024; Vargas et al. 2024). These studies often report an increase in parent use of the targeted skills and a decrease in inappropriate behavior exhibited by their children following training. The current article seeks to extend the parent intervention literature by examining the role of parent intervention on social skills training.

Social Skills

ASD is a neurodevelopmental disorder that is characterized by social communication deficits and the presence of restricted and repetitive interests and behavior (APA, 2022). Social deficits can limit the ability to develop and maintain appropriate social relationships (Lopata et al., 2006). Further, challenges with communication and social skill deficits increase the likelihood that individuals with autism will display externalizing behaviors (Shea et al., 2018). Additionally, according to the National Survey of Child and Adolescent Well-Being (2007), children aged 3 and older were reported by their caregivers to have lower social skills than was found for a national sample, such that approximately 40% of foster children had social skills categorized as "low," compared to only 16% of children in the national sample. Previous research has suggested that caregiving behaviors (such as responsive and sensitive behaviors) facilitate the development of positive social functioning in children (Zeytinoglu et al., 2022). Further, according to Hastings (2002), parents and children can reciprocally affect each other, with children's behavioral problems leading to parental stress and negative emotional reactivity, which in turn informs parental behavior. Moreover, research indicates that harsh parenting impacts both behaviors of concern and emotion regulation of the child (Chang et al., 2003; Thompson et al., 2024). When viewing parental responding to children via harsh parenting through Hasting's (2002) lens, it would reason that children engaging in challenging behavior will result in parental responding that could be identified as harsh parenting.

Social skill interventions are commonly recommended for children with ASD to strengthen prosocial behaviors and reduce behaviors of concern (Chung et al., 2024). Further, parent-implemented approaches to social skills training are receiving consideration, and there has been demonstrated effectiveness in the parent implementation of social skills training with children with ASD (Garikipati et al., 2024; Meadan et al., 2016). The purpose of this case study was to determine the effectiveness of behavior skills training on the parent acquisition of social skills training, and, subsequently, the effectiveness of parent-implemented social skills training on the acquisition of social skills for a child with autism who was in the parent-child reunification process through the child welfare system.

Methods

Protection of Human Subjects

Research for this project was approved by the university Institutional Review Board. Consenting participants and potential participants were provided an informed consent form prior to participation. Participants who agreed to participate were free to withdraw from the training at any point with no negative consequences. Identifiable data collected were de-identified by the author prior to any analysis of data.

Participants and Setting

One mother-child dyad, whose names were changed for the purposes of confidentiality, referred for the assessment and treatment of child social skill barriers and parent-response deficits, participated in this case study. Jaime was a nine-year-old child with a medical diagnosis of autism spectrum disorder. Jaime was placed into the custody of the state due to parental incarceration and the lack of access to relative placement. Further, additional professionals (e.g., case manager) supporting Jaime's mother, Bianca, and Jaime's reunification reported that Bianca indicated parenting difficulties in supporting her autistic child. Therefore, they were referred for parent-implemented applied behavior analytic services via telehealth as part of the reunification process to support Bianca's capacity for parenting skill building and to support Jaime's skill acquisition. Jaime attended public school, where they received special education support through their Individualized Education Program. Jaime accessed the general education setting throughout their school day. Jaime's initial target behaviors included "dealing with anger"/coping and "beginning a conversation."

Jaime's mother, Bianca, was a thirty-four-year-old female with a high school diploma. It was reported that Bianca did receive prior parent training as part of the reunification process; however, the specific duration and goals of that training were unknown, as noted in this study's limitations. It is noted that Bianca was

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motivated to target social skills with Jaime and participate in parent-training to support her reunification with Jaime. Throughout the process, Bianca was responsive and engaged in the training and implementation to support Jaime's skill acquisition.

Bianca and conservator, Rebecca, completed an indirect assessment interview in which they identified target behaviors for intervention, hypothesized antecedents and consequences, and possible setting events for behavior. The assessment interview was followed by three baseline videos in which Jaime's out-of-home placement staff recorded interactions between the mother and child.

Sessions took place via Zoom across multiple settings. Sessions initially took place in a group home shelter where Jaime resided during their foster care placement. The shelter housed a total of 12 children and was staffed by four rotating staff who provided supervision and support. The setting included shared living spaces, a structured daily routine, and access to educational and recreational activities. Staff members were responsible for managing the children's daily needs, facilitating group activities, and implementing behavior support strategies as needed. During sessions in the out-of-placement shelter, mother and child were in the visitation room. Subsequent sessions took place in Bianca's home. During sessions that took place in the home, the mother and child were in the family's dining room, with some sessions in the home including supervision from Rebecca and other sessions being unsupervised.

Materials

The case study was conducted via telehealth using the Zoom platform. A laptop or smartphone device was connected to wireless internet during the mother's supervised visits with her child at the out-of-home placement to conduct the meetings via Zoom. Due to the parent-implemented approach, Apple® AirPods were provided by the research team for the mother to wear during sessions for discrete feedback. *Skillstreaming the Elementary School Child* curriculum (McGinnis, 2012) was utilized to generate skill steps. Lastly, a PowerPoint presentation was generated and provided to the mother during the initial parent training, outlining both the parent and child skills steps for the mother's reference.

Research Design and Data Collection

Design

A multiple-probe design across behaviors was implemented. Two target social skills were identified, and parent implementation steps were identified to enact those target social skills. A third, fourth, and fifth target skill were identified during intervention through an unstructured interview with the mother, and intervention did not begin with these target skills until a change was demonstrated in the first and second target skills. The dependent variable was the parent implementation of the social skills training, and the child's responding. The independent variable was the use of behavior skills training of the parent implementation steps.

Measurement

Experimenters selected "Dealing with Your Anger" and "Beginning a Conversation" as the first and second target behaviors from the array of skills targeted in the *Skillstreaming the Elementary School Child* curriculum (McGinnis, 2012). "Dealing with Your Anger" was defined by the *Skillstreaming* (McGinnis, 2012) steps and included Jaime engaging in the following steps: 1) Stop and count to 10; 2) Think about your choices, which were to either tell the person in words why you are angry, walk away for now, or do a relaxation exercise which was identified as three deep breaths; 3) Act out your best choice, which was identified as Jaime selecting one of the aforementioned choices and engaging in a matched response. "Beginning a Conversation" was defined by the *Skillstreaming* (McGinnis, 2012) steps and included Jaime engaging in the following steps: 1) Choose the person with whom you want to talk to; 2) Decide what you want to say; 3) Choose a good time and place which was defined as a time when Jaime's mother was engaged in an interruptible task which included cooking, cleaning, watching television, and reading, but did not include times when Jaime's mother was on the phone or working on the computer; 4) Start talking in a friendly way, which included Jaime using a tone of voice that was not audible in another room. The mother reported during the indirect assessment interview that Jaime demonstrated deficits in these two skills, and baseline assessment demonstrated that Jaime did not engage in these skills with consistency during probes. Parent implementation of the social skills training was targeted by generating training skills steps for the mother to implement when working with her child, and included a traditional presentation sequence including presenting the scenario or discriminative stimulus to signal to Jaime that it was time for them to use the social skill, this included Bianca

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stating, "Let's practice (specific skill)" followed by Bianca prompting, when needed, if Jaime did not engage in a skill step correctly. Bianca then completed the parent implementation skill by providing reinforcement as a break and/or social praise once Jaime completed the skill steps correctly. The observers scored the percentage of training steps the mother implemented accurately. If Bianca did not need to prompt Jaime (i.e., parent skill step #2) that skill step was coded as "not applicable" and was not calculated.

Jaime's accuracy of the utilization of the social skills steps was collected as secondary data. Table 1 presents the specific steps for each skill used for data collection. For both skills, the observers scored the percentage of steps the child completed accurately. Once these two skills demonstrated a clear change in level using visual analysis of the data, two new skills (see Table 1) were identified via the mother's input. During that interview, the mother selected "Problem Solving" and "Continuing a Conversation", which were modified from the *Skillstreaming the Elementary School Child* (McGinnis, 2012) curriculum. "Problem Solving" was defined by the *Skillstreaming* (McGinnis, 2012) steps and included Jaime engaging in the following steps: 1) Identify the problem; 2) Identify two solutions to the problem, which included both adaptive and non-adaptive solutions; 3) Choose the best solution to the problem, which specifically targeted the selection of an adaptive solution; and 4) Use the chosen solution, which was defined as Jaime engaging in a matched response to the chosen solution. "Continuing a Conversation" was defined by the *Skillstreaming* (McGinnis, 2012) steps and included Jaime engaging in the following steps: 1) show whole body listening, which was defined as Jaime orienting their body toward the speaker; 2) wait your turn to speak; and 3) make a comment or ask a question on the topic. The percentage of steps completed accurately was recorded for both the mother's implementation of the novel exemplars and the child's accurate use of the skills.

Table 1. Targeted and novel social skill exemplars from Skillstreaming the Elementary School Child (McGinnis, 2012)	
Skill	Skill Steps
Specifically Targeted Skills	
Beginning a Conversation	1. Choose the person with whom you want to talk to 2. Decide what you want to say 3. Choose a good time and place 4. Start talking in a friendly way

Dealing with Your Anger	1. Stop and count to 10
	2. Think about your choices:
	  a. Tell the person in words why you are angry
	  b. Walk away for now
	  c. Do a relaxation exercise
	3. Act out your best choice

Novel Targeted Skills	
Continuing a Conversation	1. Show whole body listening 2. Wait your turn to speak 3. Make a comment or ask a question on the topic
Problem Solving	1. Identify the problem 2. Identify 2 solutions to the problem 3. Choose the best solution to the problem 4. Use the chosen solution

Procedures

Baseline. Sessions consisted of 3–15 minute free-play periods that were either in-vivo interactions with Jaime and their mother or recordings of Jaime and their mother video conferencing. All interactions were observed via telehealth or submitted as a recorded video. Experimenters observed the occurrence or

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non-occurrence of the target skills steps during each baseline observation or video recording. Recordings were taken during naturally occurring opportunities when it would be appropriate for Jaime to use either the "Dealing with your Anger" or "Problem Solving" steps. Situations included when Jaime was told they were not able to access a preferred activity, when Jaime was presented with a problem situation that required solutions, or when Jaime was self-reporting on their day that included difficulties, such as conflicts with peers or teachers. Baseline videos varied in length due to the nature of the variability of duration of each naturally occurring scenario. During probe sessions, the experimenter presented a new skill (i.e., continuing a conversation, problem-solving) with the respective child-implemented steps (see Table 1) and told the mother, "We will start with this new skill for Jaime; here are the steps for Jaime" while showing the mother the novel skill steps. Probe data were collected on the mother's implementation of the parent skills executed without formal teaching, coaching, or feedback.

Parent-Training. Sessions consisted of 30-minute direct instruction sessions via telehealth without the child present. Experimenters provided behavior skills training on each of the two selected skills by instructing the mother on the steps for each skill with a visual aid presented via PowerPoint. Instruction was followed up with a model of presenting the skill steps. The model was followed by the mother implementing a rehearsal of the parent-implemented steps with direct feedback from the experimenters. Once Bianca demonstrated proficiency in her presentation steps based on a pre-determined mastery criterion (i.e., 80% accurate implementation of the skill steps) across three consecutive data points, Jaime was brought into the intervention process for Bianca to implement the social skills with them.

Intervention. Sessions consisted of 30-minute sessions via telehealth with the mother and child present. Each session was initiated with a reminder from the experimenter that the mother and child would work through the target skills using the parent skills taught. Following the probe sessions, the experimenter then provided instruction, modeling, rehearsal, and feedback, as needed, for the mother's implementation of each new skill over Zoom using AirPods, while Bianca was conducting parent-implemented intervention sessions with Jaime. Intervention with Jaime began with Bianca using her parent steps of present, prompt, and reinforce to have Jaime list the skill steps. Jaime was asked to list the steps initially, so they had the skill steps committed to memory. After Jaime mastered the listing of the steps by accurately recalling the steps at 80% accuracy across three consecutive data points, Bianca then initiated the same parent steps (I.e., present, prompt, and reinforce) for Jaime to role play scenarios using the target skills. If Jaime could roleplay a skill successfully, Bianca moved from presenting the scenario to reinforcing Jaime's correct implementation of the skill. If Jaime was unable to complete the skill, or engaged in an incorrect response, Bianca moved from presenting the scenario to prompting Jaime through the missed or incorrect skill step (e.g., "you forgot to count to ten, show me how to count to ten; one..."). Once Jaime completed the step correctly, they were provided with reinforcement from Bianca in the form of social praise.

Interobserver Agreement

Interobserver agreement was obtained by randomly selecting 21% of observations. One trained observer along with the primary investigator simultaneously and independently collected target skill data for each selected observation. The percentage of agreement was computed by taking the number of agreements between the independent observers and dividing it by the total number of agreements plus disagreements. Using this method, the mean interobserver agreement was 95.7% for child data (range = 86%–100%) and 99% for the mother's data (range = 95%–100%).
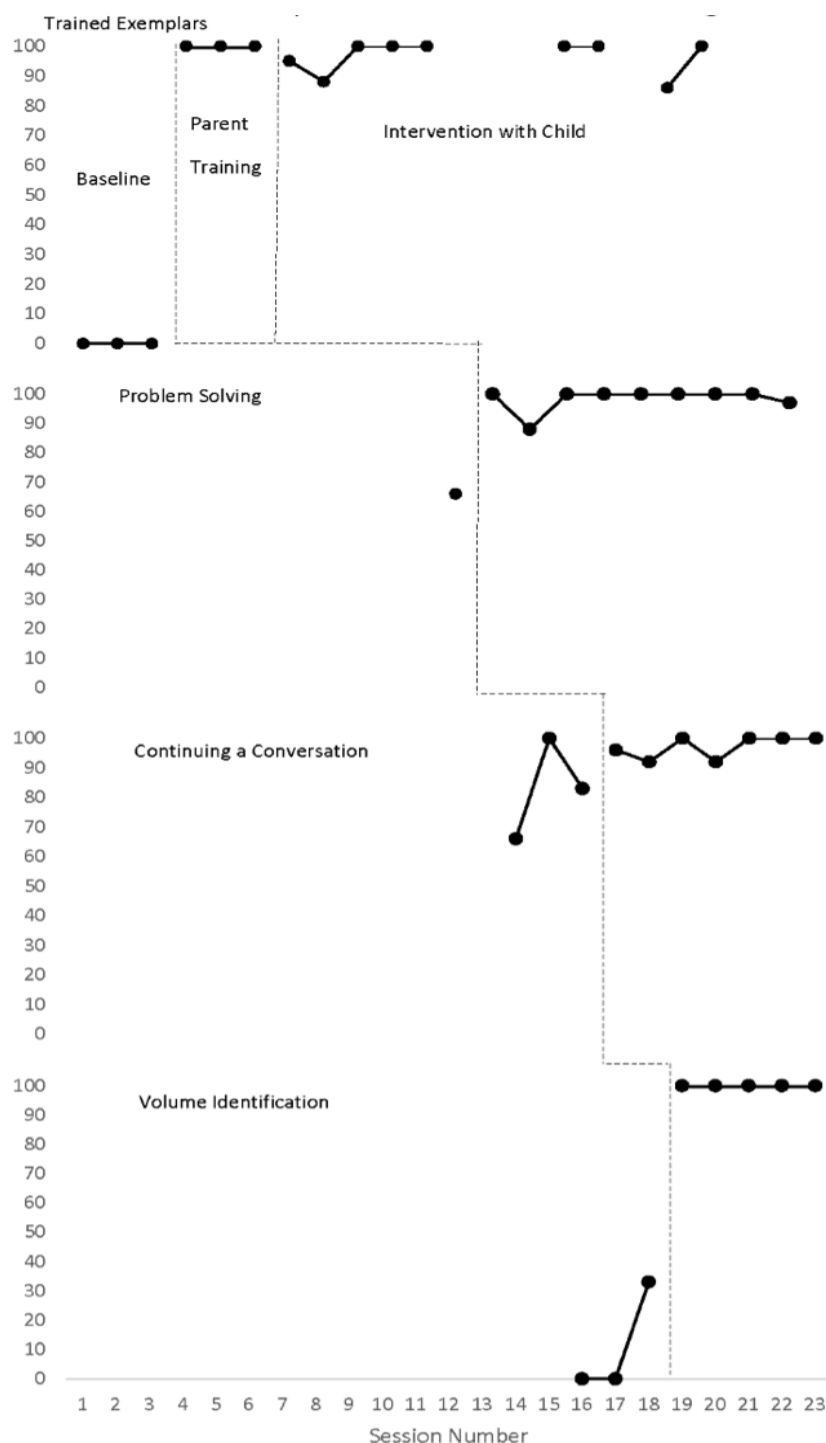
<div align="center">

Results

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Parent Implemented Social Skills

Trained Exemplars

The percentage of accurate implementation of the parent-implemented social skills training steps for the two trained exemplars was calculated during baseline, during parent training, and during direct intervention with the child. This data is represented in Figure 1. Bianca's baseline levels of the implementation of the parent steps averaged 0% (range = 0%). During parent training, her average accuracy of implementation of the parent steps was 100% accuracy (range = 100%). After parent training, Bianca began implementing the social skill training steps with Jaime. Bianca averaged 96.5% accurate implementation (range = 86%–100%) during sessions with her child.

Figure 1

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Note: Percentage of accurate utilization of the parent implemented steps by the mother

Novel exemplars

The percentage of accurate implementation of the same parent-implemented social skills training steps presented across novel social skill behaviors (e.g., novel exemplars) was calculated during baseline and during direct intervention with the child. For "Continuing a Conversation", Bianca implemented the parent steps with 66% accuracy before she was provided explicit modeling and feedback. During intervention sessions, where Bianca was working directly with her child and was provided modeling and feedback over telehealth, Bianca averaged 98.5% accurate implementation (range = 88%–100%). When implementing the parent steps for the novel skill, "Problem Solving", prior to modeling and feedback, Bianca implemented

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the steps with 83% accuracy (range = 66%–100%). During intervention sessions, Bianca averaged 97.1% accurate implementation of the parent steps across the targeted skills (range = 92%–100%).

Child Skill Acquisition

Jaime's acquisition of the targeted social skills, as implemented by their mother, was a secondary data source collected to determine the effectiveness of the parent-implemented social skills training. The percentage of accurate implementation of the social skill steps for the two trained exemplars was calculated during baseline and during parent implemented intervention. This data is represented in Figure 2. Jaime demonstrated 0% accurate implementation of the skill steps to "Dealing with Your Anger" during baseline. They demonstrated an average of 16.6% (range = 0%–50%) accurate implementation of the "Beginning a Conversation" skill steps. After parent implementation began, Jaime was asked to list the steps to the trained exemplars. Jaime demonstrated an average accuracy of 92.6% (range = 78%–100%) for listing the "Dealing with Your Anger" steps and an average accuracy of 95.6% (range = 87%–100%) for listing the "Beginning a Conversation" steps. Jaime was then asked to role-play the implementation of two skills in contrived scenarios with their mother. Jaime demonstrated an average accurate responding of 95.4% (range = 83%–100%) for the "Dealing with Your Anger" steps and an average accurate response of 97% (range = 88%–100%) for the "Beginning a Conversation" steps.

Figure 2

Trained Exemplars
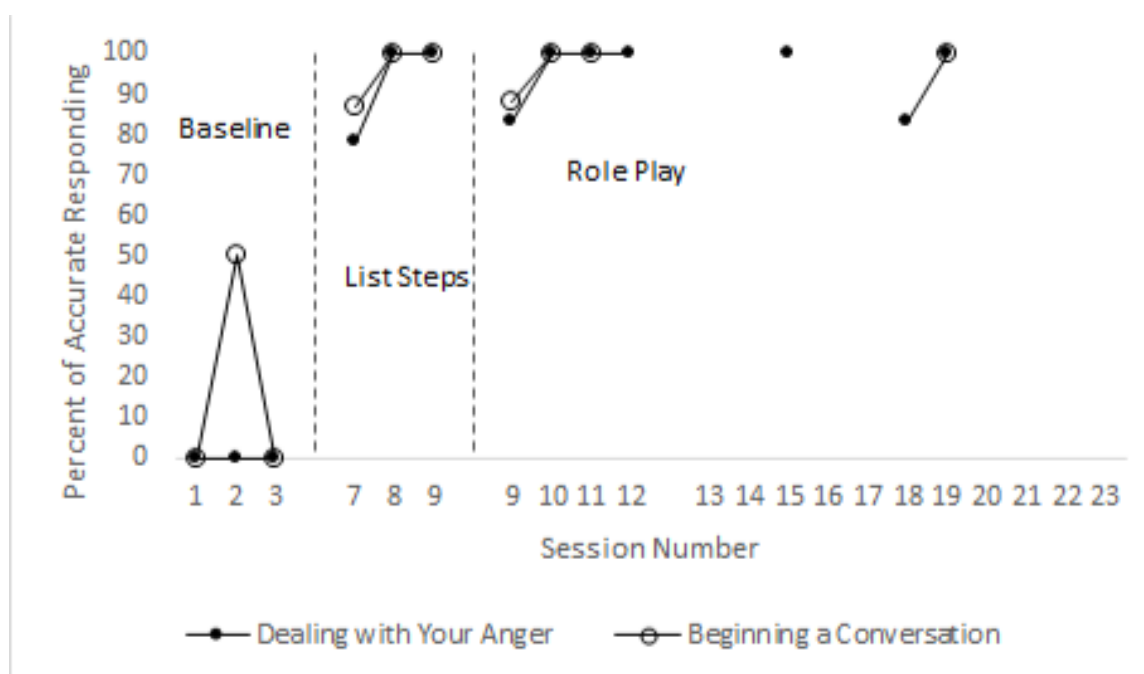
Note: Percentage of accurate utilization of the specifically targeted social skill exemplar steps by the child

For the novel exemplars, as outlined in Figure 2, Jaime demonstrated a 0% accurate implementation of "Problem Solving" during baseline and demonstrated a 33.3% (range = 0%–50%) average accurate use of "Continuing a Conversation" steps during baseline. After the parent-implemented intervention, Jaime was able to list the steps at 100% accuracy across both "Continuing a Conversation" and "Problem Solving" for three consecutive data points. During the role play scenarios, Jaime demonstrated an 80.8% (range = 60–100%) average accurate utilization of the "Problem Solving" steps. Jaime also demonstrated an 85.1% (range = 50%–100%) average accuracy of employment of the "Continuing a Conversation" steps during parent implemented intervention.

Jaime demonstrated interfering behavior that consisted of inappropriate verbal interactions, which were defined as Jaime engaging in a social comment with an inappropriate tone of voice (e.g., yelling or having a sharper tone than their normal tone of voice), making a comment that is off-putting (e.g., "What are

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you looking at?", "Why are you here?", negative self-talk), and/or interrupting others. Figure 3 outlines Jaime's frequency of inappropriate verbal interactions pre-intervention and during the intervention. The interfering behavior was separated by the type of visitation (i.e., supervised visits at the shelter, supervised visits at home, and unsupervised visits at home. Jaime demonstrated an average frequency of 3.33 occurrences of inappropriate verbal interaction during baseline. After the parent-implemented intervention, Jaime showed an average frequency of 0.35 occurrences of inappropriate verbal interaction. During supervised visits at the children's shelter, Jaime engaged in an average of 1.33 instances of interfering behavior. During supervised home visits, Jaime engaged in an average of 0.16 instances, and during unsupervised home visits Jaime engaged in zero levels of interfering behavior.

Figure 3

Untrained Exemplars
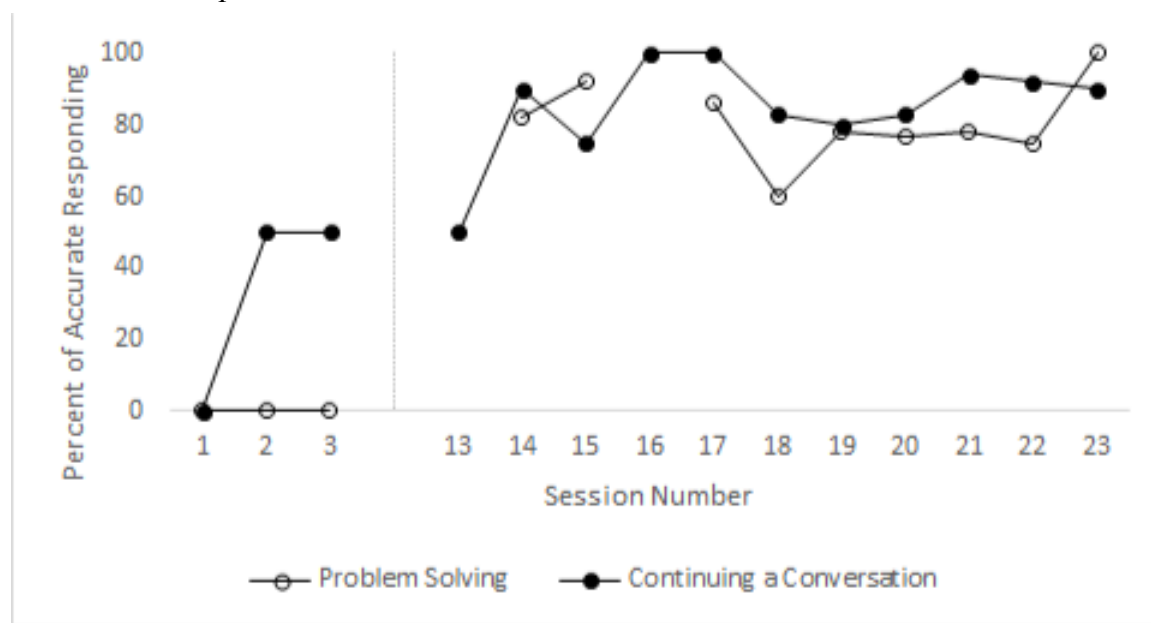
Note: Percentage of accurate utilization of the untrained social skill exemplar steps by the child

Discussion

It has been well documented that individuals with ASD can demonstrate deficits in social interactions which can impact their relationships with others, including parents, peers, and teachers (Lopata et al., 2006). Further, these social communication challenges increase the prospect that individuals with autism will display externalizing behaviors (Shea et al., 2018). Parent implemented interventions have been demonstrated as an effective intervention for teaching behavioral skills to children with ASD (Meaden et al., 2016; Dongan et al., 2017). Overall, under the current case study, the preliminary results indicate that parent training intervention was an effective way to increase parent skills and subsequently increase social skill acquisition in the child.

For one mother-child dyad, parent training followed by the mother's implementation of social skills training led to the mother's acquisition of social skills training and the child's acquisition of four social skills: dealing with anger, beginning a conversation, continuing a conversation, and problem-solving. The results support earlier research that demonstrated the success of parent implementation of social skills training and the child's acquisition of the trained skills (Dongan et al., 2017). This preliminary analysis has also extended that literature by demonstrating parent-implemented interventions can support building skills in both the parent and the child. In this specific case, reunification was also supported through the parent-implemented intervention process. Future research should examine the effectiveness of alternative parent-implemented interventions (e.g., functional communication training, consequence-based interventions, skill acquisition, etc.) on the behavior and skill acquisition of children and their parents during the reunification process to further substantiate the Stephen Group findings that indicate parent training is a critical process for out of placement families.

Both mother and child showed clear changes in their behavior following their respective interventions. Overall, the results of this brief study suggest parent training followed by parent-implemented intervention

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may be useful tools to help both children with ASD learn social skills and parents of children with ASD learn intervention skills to better support their children. Further, the results of this intervention and the outcome of Jaime and Bianca's successful reunification suggest that parent training in behavioral interventions may be an additional useful tool in the reunification process, especially as further research extends and clarifies the role of behavioral interventions and parent-implemented interventions in the reunification process.

Limitations and Future Research

The intervention presented in the current study did not include naturalistic opportunities for the skills of "Dealing with Your Anger" and "Problem Solving;" thus, generalization of the skills from contrived scenarios to organically occurring situations was not presented and should be considered a limitation of the current study. Future research should consider generalization across situations for these skills. Further, the possibility of familial reactivity throughout the process is a limitation to understanding if the changes are being maintained outside of the sessions with the experimenter. Further, generalization of the methodology to other families may be limited given the highly specific variables within this case study's context. However, it is noted that the use of behavioral skills training to support parenting skills is a valuable area to consider within the foster care framework to support both foster parents and biological parents.

As aforementioned, this project was not able to secure the data regarding the legal guardian's participation in treatment prior to the youth becoming involved with the current study, nor what treatment encompassed. It is possible that prior parenting training influenced Bianca's engagement and ability to implement the ABA-based social skills intervention, either by providing foundational skills that supported implementation or by contributing to intervention fatigue due to the demands of multiple training programs. However, when reviewing the results, it is notable that parenting skills were low prior to intervention, indicating prior parent training did not overtly impact Bianca's skillset targeted within this study. The effectiveness of ABA interventions in child welfare settings may be impacted by the competing demands placed on caregivers, particularly those required to participate in multiple services. Parents navigating the child welfare system often face time constraints and systemic barriers that may limit their capacity to fully engage in and generalize intervention strategies. Given these challenges, future research should explore how service coordination and caregiver support impact the fidelity of ABA implementation. Additionally, the feasibility of embedding social skills training and coaching within child welfare systems should be examined to determine the extent to which such services can be effectively integrated and sustained within existing frameworks. Future research will want to consider providing parent training at the onset of a youth's entry to out-of-home placement for several improvements to this study. Starting the parent training process at the onset of the out of placement would allow for a more thorough assessment process identifying goals matching the current problematic behaviors and skill deficits in a hierarchical way, with foundational skills being targeted first and higher-order skills being layered in after mastery of foundational skills. It is unclear from the case history available where anger, problem-solving, starting and continuing a conversation contributed to the reasons for the out-of-home placement. Assessments should strive to identify behaviors foundational to the removal, either parent or child, to remediate and resolve said barriers, thus improving the chances of reunification resulting in no further need for removals. For example, in this study, the research team provided social skill acquisition supports to Jaime but also provided parenting strategies and supports to Bianca in an effort to support her capacity in her parenting.

Incorporating parenting training into the treatment process from the onset would also allow for the generalization discussed above. Additionally, as youth spend time with their caregivers on visits and passes, data could be taken to compare the in-session use of parenting skills and overall use of skills acquired to the use of said skills outside of the coaching environment. This could involve the incorporation of multiple data collection methods, such as direct observation of parent-child interactions in natural settings (e.g., home, community) which could provide objective measures of skill generalization. Additionally, parent self-monitoring logs or daily behavior tracking could capture the frequency and consistency of skills used outside of sessions. Barriers to implementing the interventions and using the skills could be identified, problem solved, refined, and further practiced as part of the ongoing treatment, not just during the reunification process.

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Statements and Declarations

Funding

Ethics Approval and Consent to Participate

This study was approved by the Institutional Review Boards at Texas Tech University.

Informed Consent

Informed consent was obtained from all participants included in the study.

Editorial Note

Daniel Kelly is the Editor-in-Chief of the Journal of Foster Care and an author on this paper. The review process was conducted by another editor for the journal and at no time did Dr. Kelly have access to the reviews or discussions regading this submission. The editorial team felt the Journal of Foster Care was the appropriate outlet for this manuscript and ensured a blind and unbiased review process was conducted.

About the Authors

Katherine (Katy) Wheeler, PhD, BCBA , LSSP, is an assistant professor in the Behavior Analysis Program at the University of Cincinnati. She is a Board Certified Behavior Analyst (BCBA), a school psychologist, and a certified therapist in Parent-Child Interaction Therapy (PCIT).

Jennifer Hamrick, PhD, BCBA-D, is an Associate Professor at Texas Tech University and is the Endowed Director of The Burkhart Center for Autism Education and Research. She is also a certified teacher and Board Certified Behavior Analyst-Doctoral (BCBA-D) with over 18 years of experience in the field of special education in large, public school districts primarily monitoring educational programming for self-contained special education programs across multiple campuses.

Kate Pennington was a graduate research assistant at the Burkhart Center for Autism Education and Research at the time of this writing. Her focus and area of interest was in counseling services to support the

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autistic community.

Daniel P. Kelly, Ed.D., DTE, is an Assistant Professor of Technology, Design, and Engineering Education at NC State University. He is the Editor-in-Chief of the Jounal of Foster Care and a former foster youth. His research focuses on increasing career and educational opportunities and awareness in STEM for youth at high risk of non-completion of high school, particularly those in non-parenetal custody.

Amanda Hampton, M.Ed., BCBA, LSSP, is a graduate of Texas Tech University and currently serves as a school psychologist in Austin, Texas. She is also a Board Certified Behavior Analyst with clinical and research interests centered on supporting individuals with autism and related developmental disabilities. Her applied work emphasizes caregiver training, the supervision of graduate students in applied behavior analysis, and school-based collaboration and behavior consultation.

Jennifer Hixson, PsyD, BCBA, LSSP, is a mental health professional providing services in the Middle Tennessee area and teaching for several higher education institutions. She obtained her Doctor of Psychology from the California School of Professional Psychology in 2007 and has been practicing in child and adolescent mental health and family systems work since 1998 as a clinical psychologist and school psychologist.

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