Improving family quality of life is an important goal when working with families of children with autism. Researchers have attempted to measure changes by developing indices of quality such as affect, stress, and confidence. The purpose of this study was to examine the effects of a group parent-coaching program on measures aimed at addressing quality: a) parent confidence, stress and affect ratings; b) child affect ratings; c) the frequency of coordinated joint attention (CJA); and d) parent report of satisfaction and efficacy. Over the course of four weeks, the coaching program involved group presentations, discussions, video sharing, and problem solving, and individual in-vivo coaching sessions regarding specific child skill development. Results from the five parent-child dyads suggested increases in areas associated with quality of life. Results are discussed in the context of quality themes and mixed methods research.
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Amber Marie Wiles
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INTRODUCTION

When working with families of children with autism, improving the family’s quality of life is an important goal. Wolf (1978) expressed that quality variables are easily recognized as important, but difficult to objectively measure. Typically, subjective labels, such as happiness, have been used to describe conditions and variables that people designate as important (Wolf, 1978). Wolf (1978) recognized that these quality variables are complex and difficult to measure but that they often address the heart of socially valid outcomes in applied behavior analysis (ABA). In fact, the applied branch of behavior analysis is “dedicated to helping people become better able to achieve their reinforcers” (Wolf, 1978, p. 206). Wolf (1978) identified three indicators related to ABA and quality of life: the goal is worthwhile, the procedures are appropriate, and the effects are important. Using these three indicators allows a standard for assessing areas related to quality of life. Enhanced quality of life for a family may result in reduced stress.

Research has shown that parents of children with developmental disabilities, such as autism, have higher stress levels (Sanders & Morgan, 1997). Certain types of parent training may allow parents to learn skills that result in decreased stress and hopefully increased quality of life (Koegel, Bimbela & Schreibman, 1996). Koegel, Bimbela, and Schreibman (1996) examined the collateral effects of two parent-coaching approaches, pivotal response training (PRT) and individual target behaviors (ITB), on family interactions during dinnertime. The PRT format focused on principles of motivation and teaching parents to respond to multiple cues, while ITB emphasized working on one target at a time in a discrete trail format. Results indicated that for parents in the ITB condition stress ratings stayed within the neutral range pre parent training and post parent training. In contrast, for parents in the PRT condition, stress ratings increased from
neutral to positive post training. Another variation on parent training is a partnership model. Brookman-Frazee (2004) indicated that forming a collaborative relationship, in which clinicians and parents are partners in the development of the intervention, leads to higher ratings of observed confidence and lower ratings of observed stress as compared to clinicians developing the intervention without parents. In addition, children exhibited more positive affect, high levels of responding, and more appropriate engagement when parents and clinicians formed a collaborate relationship. Developing a parent-training program that teaches parents skills they find useful may result in reduced stress, leading to an improved quality of life. These two studies are noteworthy in that they examined indices of quality of life, such as stress, thereby providing meaning about the social validity of the goal, procedures, and outcomes (Wolf, 1978).

Table 1 presents an overview of five parent-training studies that included a combination of indices, narratives, and ratings of quality. Brookman-Frazee (2004), Ingersoll and Dvortcsak (2006), Koegel, Bimbela, and Schreibman (1996), Koegel, Symon, and Koegel (2002), and Schertz and Odom (2007) were chosen because they specifically included measures beyond skill acquisition. Each of these studies demonstrated changes in parent use of behavior change procedures and increases in the quantity and quality of parent and child interactions. In each of the studies, the quality of parent and child interactions were measured to evaluate the significance of the intervention by including measures of quality such as, ratings of child affect and ratings of parent affect, confidence, and stress, and parent observations and satisfaction of the parent-training program.

No one study included all these measures. Each study and corresponding contributions to the measurement of quality is presented here. Brookman-Frazee (2004) compared the effects of dissimilar parent education interventions. Observation ratings of parent stress and confidence
were used. Child affect was a composite score of two affect ratings including child happiness and child interest. The approach that involved forming a collaborative relationship between parents and clinicians resulted in higher ratings of confidence and lower ratings of stress and children exhibited more positive affect, high levels of responding, and more appropriate engagement.

Ingersoll and Dvortcsak (2006) implemented a group training program focusing on naturalistic behavioral interventions for social-communication goals. The researchers assessed the parents’ and teachers’ satisfaction of the program using a 7-point Likert rating scale. Results indicated that parents felt strongly their child had made progress on communication goals, but parent did not always understand how to monitor progress and make data based decisions. Overall, parents teachers reported that they enjoyed the training program.

Investigators have also studied the effects of specific teaching procedures, such as PRT on indices of quality. Koegel, Bimbela, and Schreibman (1996), described earlier, compared the effects of two parent-training approaches, PRT and ITB, and used four 6-point Likert scales to measure levels of happiness, interest, stress, and communication styles. PRT resulted in more positive family interactions with an increase in all four measures. Similarly, Koegel, Symon, and Koegel (2002) measured the quality of family interactions using a composite affect score that rated the parents happiness, interest, and stress while implementing PRT techniques during interactions with their child. Following training, parents utilized PRT techniques more frequently, children’s vocalizations increased, and parents had a more positive affect rating during interactions with their child.

Schertz and Odom (2007) examined parent implemented techniques to promote joint attention. They measured focus on faces (child looking at any part of mother’s face), turn-taking, response to joint attention (child alternating looks between object and parent’s face when parent
attempts to draw their attention to object) and initiating joint attention (child independently alternating looks between object and parent’s face). Two of the three participants demonstrated joint attention across all direct measures. In contrast to rating scales utilized by other researchers, Schertz and Odom (2007) also employed a qualitative analysis, interviews, and structured narrative. Qualitative data were collected by transcribing initial interviews, weekly sessions, and daily parent notes. The notes were coded and organized into five emerging themes: parent fidelity with planned intervention mediated progress, child progress in social-communication development facilitated reduced aggression, physical activity motivated children to interact, simplifying the presentation of the parent’s face facilitated focus on faces, and turn-taking activities based on face-to-face play promoted joint attention better than play with toys. The parents’ qualitative data regarding their child’s progress corresponded with the trends in the quantitative data. The benefits of Schertz and Odom (2007) mixed methods approach is that the parents and researchers were able to report on variables not readily quantifiable, for example, frustration with procedures that parents may have experienced during the intervention.


The current study sought to use the measures summarized above to evaluate the effects of a short-term parent-coaching package on parent and child affect, parent stress and confidence,
CJA, and parent interviews. It should be noted that, like Schertz and Odom (2007), the present study employed a mixed methods approach. Mixed methods research is the combination of quantitative and qualitative research techniques or methods into a single study (Johnson & Onwuegbuize, 2004). A mixed methods research design can yield a combination of useful quantitative and qualitative information (Johnson & Onwuegbuize, 2004). The complementary qualitative research design can aid investigators in understanding variables that may have influenced the observable changes and help to identify methods for later development of quantitative measures (Johnson & Onwuegbuize, 2004; Schertz & Odom, 2007). Furthermore, the design yields valuable information regarding the social validity of the program (Johnson & Onwuegbuize, 2004; Schertz & Odom, 2007). Qualitative research may reveal more information indicating if the participants view the goals as worthwhile, the procedures as appropriate, and the effects as socially valid (Wolf, 1978).

The parent-coaching package itself incorporated aspects of several of the studies described earlier. First, like Ingersoll and Dvortcsak (2006), it employed a group format and similar to the parent/clinician partnership utilized by Brookman-Frazee (2004), parents were included in the development of the intervention. Second, like Ingersoll and Dvortcsak (2006), Koegel, Symon, and Koegel (2002), and like the PRT condition used by Koegel, Bimbela, and Schreibman (1996) the parent-coaching package included naturalistic teaching techniques. The aim of this study was to evaluate the collaborative group parent-coaching package on measures that are presumed to be related to quality of family life.
METHODS

Participants

Six parent-child dyads volunteered to participate in the study. One family was unable to participate fully in the coaching program. Five of the families participated in all the coaching program activities and these families gave informed consent for reporting results.

Families had to have a child enrolled in the autism treatment program at one of the three sites flyers were sent to and attend all Saturday training lectures to be selected for participation. Prior to this study, the children received a diagnosis of autism by a professional, not associated with this study, based on the diagnostic criteria found in the *Diagnostic and Statistical Manual of Mental Disorder (DSM-IV)*: American Psychiatric Association, 1994). All of children attended an autism treatment clinic either in the day program for 20 hrs per week or the after school program for eight hrs per week. Four of the parent-child dyads were mother and child and one dyad was father and child. Each of the families, using pseudonyms, is described below. Two additional fathers attended the training lectures, but were not present for the in home training sessions. No data was collected on these two fathers.

Family A. Family A included a mother, Mary, and her son, Christopher of Hispanic decent. Mary was 28 years old, full-time homemaker. Mary was a high school graduate and received parent coaching once a month from the clinic Chris attended. Chris was 5 years old and lived at home with mother, father, and older bother. Chris demonstrated aggressive behavior given a demand and did not engage in activities with mom or sibling voluntarily. His vocal verbal repertoire consists of 2-3 word requests with eye contact. Chris received 20 hrs of behavioral therapy per week.
Family B. Family B was a mother and son of Caucasian decent. The mother, Tara, was 43 years old, full-time homemaker with a doctoral degree who previously taught college history. Tara had received parent coaching once a month offered by the autism treatment program her son, Jason, attended. Jason was 4.5 years old at the time of the study. Jason has an extensive receptive and expressive language repertoire and is able to follow simple instructions but rarely did when mom requested. Jason using 3-5 word mands with limited eye contact and only commented during play when mom required a response and she typically needs to prompt a response. Jason independently remained in close proximity to mom during play but joint attention and engagement were low. Jason received 20 hrs of behavioral therapy each week.

Family C. Family C consisted of a father, Rick, and son Ralph of Asian decent. Rick was 40 years old, full-time engineer and had a bachelor’s degree. Rick had previous parent coaching from an autism clinic his son attended. Ralph was 7 years old at the time of the study. Ralph rarely approached Rick, and when he did, engagement was short and he had negative or neutral affect. Ralph had infrequent eye contact and a limited vocal verbal repertoire using 1-3 word requests. Ralph seldom followed instructions given by dad. Ralph received 9.5 hrs of behavioral therapy each week.

Family D. Family D included a mother, Nikki, and her son, Ulysses, of Asian decent. Nikki was 34 years old, a full-time homemaker, and had a bachelor’s degree. Nikki reported no previous parent coaching prior to this study. Ulysses was 5 years old at the time of the study. Ulysses used 3-5 word requests. He engaged in high rates of stereotypic behaviors, approaches to mom were infrequent, and he was usually not engaged with mom. Ulysses could follow some simple instructions, but not reliably.
Family E. Family E consisted of a mother, Amy, and her son, Zane. Amy was 43 years old, full-time financial recruiter with a bachelor’s degree. Amy reported having some previous parent coaching provided by the autism treatment program Zane attended. Zane was 3.5 years old during the study. Zane has an extensive verbal vocal repertoire and will requests items using full sentences. Approaches to mom were infrequent and were usually prompted. Zane engaged in high rates of stereotypic behavior when playing with mom. Zane preferred to walk around while shaking two items. Zane received 20 hrs of behavioral therapy each week.

Parent coaches. Two parent coaches co-conducted the sessions. Both parent coaches were senior graduate students at the University of North Texas at the time of the study. Parent coaches were in their mid-twenties and of Caucasian descent. One parent coach had three and half years of experience working with children diagnosed with autism and their families. The other parent coach had six years of experience working with children diagnosed with autism and their families. Both parent coaches were present at all training sessions. The faculty advisor had her Ph.D., was a board certified behavior analyst, and had over thirty years of experience with families and children with autism. The faculty advisor was in her 50s and is of Caucasian and Asian descent.

Settings

The study took place in two main settings, a conference room within an autism treatment clinic and in the families’ homes. A children’s hair salon was a setting used for Family E’s chosen goal.

Training lectures. The study primarily took place at an autism treatment program that provides services based on the principles of applied behavior analysis (ABA) for children ages 3-8 years old. The autism clinic provides a comprehensive treatment program that utilizes
evidence-based practices. The program strives to be culturally responsive and collaborate with families of all income levels. The training lectures were conducted in a conference room at the clinic.

Home training sessions. Baseline and training assessments occurred directly in the families’ homes. The families chose either the family room or the child’s bedroom to film the baseline and training sessions, which consisted of a variety of toys, a couch or bed, and in some homes a television. Family E had training sessions in the home and at the child’s hair salon. The salon contained salon chairs, mirrors, video monitors, and a train set in the waiting area.

Materials

Intake. Flyers were handed out to families at three autism-treatment program sites (Appendix A). When the parents contacted the autism treatment program they were provided an information packet with more details regarding the program (Appendix B).

Training lectures. The training lectures were held in a conference room containing long tables, chairs, a projector and a projection screen. The Microsoft PowerPoint® slides were presented on the projection screen and the connected laptop computer. Participants were given a three-ring binder that contained the PowerPoint® presentations and accompanying workbook pages (Appendix C).

Home training sessions. The researchers filmed all assessments in the home with a KODAK PlayTouch®. The researchers carried a three-ring binder with information (e.g., filming schedule) into the home during each assessment. For Family E’s chosen goal hair clippers, preferred edibles and toys were used.

Data Collection and Measures
The investigators collected two types of information, quantitative data and qualitative to evaluate the efficacy and social validity of the parent coaching program.

Quantitative data were collected in the family’s home with video. All assessments lasted 10-min and occurred prior to intervention, once a week during intervention, and one during follow-up. A paper and pencil system was used. The researchers collected data from the recorded video. The data sheet can be found in Appendix D. The following quantitative measures were used: (a) observation ratings of parent stress, (b) observation ratings of parent confidence, (c) observation ratings of parent and child affect, and (e) parent and child coordinated joint attention.

Qualitative data was collected during the parent satisfaction interview and recorded with an audio recorder. Audio-recordings yielded notes for analysis. The notes were organized into categories and analyzed for emergent themes that involved the parents’ happiness and children’s progress in relation to the intervention.

Observation ratings of parent confidence and stress. The observation rating scales for parent confidence (Table 2) and stress (Table 3) were adapted from similar scales Brookman-Frazee (2004) used in which they compared parent affect and stress across two parent education programs. Two 5-point Likert scales, numbered 0 to 4, were used to assess parent stress level and parent confidence during the parent-child interactions. These measures were scored during 10-min videotaped samples.

Observation ratings of parent and child affect. The observation rating scale for parent and child affect (shown in Table 4) was adapted from a similar scale used by Koegel, Vernon, and Koegel (2009). Specifically, a 5-point Likert scale, numbered 0 to 4, was used to assess parent and child affect during the parent-child interactions. Affect was scored during 10-min videotaped samples.
Parent and child coordinated joint attention. Coordinated joint attention (shown in Table 5) was counted when three gaze shifts occurred between an event or object(s) and the parent’s face (Cermak, 2011).

Interobserver agreement. Interobserver agreement (IOA) was measured for a 100% of sessions across behaviors and conditions. The author trained the observers using explanations of the observation code, providing examples and non-examples, and practicing the observation code with practice videos. The observers used paper and pencil system and data sheets to collect data. The researcher transferred data to a spreadsheet software to create graphs and tables. For observation rating scales, an agreement was defined as both observers giving the exact rating for each 10-min sample. Reliability ratings were 100% for observed parent affect, 100% for observed child affect, 100% for observed parent confidence, and 92% for the observed parent stress. To calculate IOA for coordinated joint attention (CJA), the agreements were divided by the agreements plus disagreements and multiplied by 100%. Average interobserver agreement for CJA was 96% (Range 80% to 100%).

Parent satisfaction measures. During the final training day, the parents were asked questions (Table 6) to assess their satisfaction with the training procedures and outcomes. The responses were transcribed and organized into themes that focused on parent and child relationship, family life, child skills, and the group training setting.

Experimental Design

A mixed methods research design was utilized to assess the effects and social validity of the parent-coaching program. An A-B design with a follow-up probe was implemented across direct measures and ratings to assess observable change. Qualitative research methods allowed exploration of parent report regarding the parent-coaching program. To obtain the qualitative
data responses from the parent satisfaction interviews were audio-recorded and then organized into themes.

Procedures

A sequential overview of the parent-coaching program is shown in Table 7. The entire coaching program was approximately 12.5 hour from intake to follow-up.

Intake. Flyers (Appendix A) were sent to three autism treatment clinics within a metropolis and families contacted the autism treatment clinic if they were interested in the program. A manager at the clinic then provided the parents with additional information (Appendix B) and parents contacted the investigators if they were interested in the program. During the first call, parents provided their child’s age and set up a baseline filming time.

Baseline. Baseline videos were collected prior to the training presentations. Each family had one 10-min baseline video. Families were asked to engage with their child the way they normally would during play. During these sessions, no specific feedback regarding skill performance was provided. In each baseline video, observers rated each participant on the quality measures outlined above.

Intervention. Following baseline sessions, participants attended four 2.5 hr training lectures. An assessment video was filmed each week before the Saturday training lectures. An outline of each day of the parent-coaching program can be found in Table 8 and are described below.

*Training presentations.* The training sessions were divided across four days consisting of accompanying Microsoft PowerPoint® slides, video and live modeling of correct and incorrect implementation of procedures, skill practice and role-play with corrective feedback, and an accompanying workbook with skill-related questions and activities. Participants watched their
10-min video sample(s) each week and discussed their strengths and skills to work on with the parent coaches.

Each training lecture parents were greeted at the door and childcare volunteers accompanied their children to a gym within the autism clinic. Upon entering the conference room, parents were encouraged to help themselves to the breakfast provided.

*Day 1: The Basics.* The purpose of Day 1 was to provide the parents with an overview of the parent-coaching program, build rapport within the group, and discuss the basics of ABA. Day one introduced the following skill units: introduction to ABA, understanding behavior (ABC’S), working in a group and family goals. When the parents took their seats, an agenda for the day was presented and each of the parent coaches introduced themselves and told the parents about their background, interests, and experience. The faculty advisor was not present, but the parent coaches shared with the parents that she would be overseeing the program and has over 25 years of experience providing evidence-based intervention to children with autism and their families. The parents paired up with another parent, answered five questions, and then introduced each other to the group. After introductions, the parent coaches shared the goals and program sequence of the program. Next, the basics of applied behavior analysis (ABA) were discussed and videos demonstrating various ways to utilize the principles of ABA in a therapy setting were shown. The parent coaches explained that behavior analyst understand behavior by examining contingencies, taking a systems level approach, collaborating with a team, and utilize research based procedures while measuring progress. Antecedent, behavior, and consequences (the ABCs) (Cooper, Heron, & Heward, 2007) were defined for parents and parents worked in pair to determine the ABCs in examples provided. Parents were provided a rationale for using an ABA approach and a group approach. In addition, the parent coaches emphasized that when working
within a group it is important to offer constructive feedback, remain open and honest, and be understanding and considerate of other as they start this journey together. Each family filled out a worksheet to aid them in choosing a goal to target. The worksheets contained questions regarding what the parents wanted to stay the same and what they wanted to change. If the parents choose a long-term goal, the parent coaches prompted the parent to think about a short-term goal that would help them reach that bigger goal. For example, a parent wanted to work on general compliance, after talking with the parent coaches and the group the parent decided to work on gaining approaches from their child before working on general compliance. Then the parents shared their potential goal with the group. The parent coaches reminded the group that it important to listen, support, and offer constructive feedback while sharing goals. The group watched a video of a parent and child not in the parent-coaching group and discussed what the parent did well and areas that the parent could improve. Prior to leaving, parents viewed their baseline videos spoke with the parent coaches, scheduled their next filming time, and were asked to continue to think about a goal they wanted to work on with the parent coaches.

Day 2: The Bond. The purpose of Day 2 was to focus on enhancing the relationship between the parent and their child. Day 2 consisted of identifying reinforcers, building rapport (Carr et al., 1994) creating a healthy environment, and shared control and contingencies. First, the parent coaches went over the agenda and reviewed important concepts from Week 1. Reinforcement was introduced and the definition and examples of positive reinforcement were provided (Cooper, Heron, & Heward, 2007). Parents wrote down examples of positive reinforcement in their own life, shared those with the group and then discussed them. Parents learned how to identify potential reinforcers and the importance of using a reinforcer appropriately. The parent coaches defined rapport, explained how to build rapport, and
emphasized the importance of rapport to parents (Carr et al., 1994, Hart & Risley, 1999). A video clip from one of parents in the group was shown to the group because this parent did an exceptional job with the Step 1 of building rapport (i.e., have fun) and parents practiced this step with each other using toys that they had brought from home that their child enjoyed playing with. The parent coaches provided toys if a parent forgot to bring them. How to create and arrange a healthy environment was explained and demonstrated for parents. Parents worked in pairs to complete a worksheet on creating a healthy environment and then the worksheet was discussed with the entire group. Briefly, joint attention was defined and an example was demonstrated. A video was shown to illustrate the potential difference of joint attention between a neurotypical child and their parent and child with autism and their parent. Parent coaches emphasized important points to think about when delivering reinforcement: make it immediate, use a variety of reinforcers including social, make it fun, and make it contingent. The parent coaches explained how to expand reinforcers and a video was shown. The group discussed an example of how to expand reinforcers and then using the toys they brought and toys provided the parents practiced with each other the steps involved in expanding reinforcers.

During the second training presentation, participants decided on a specific goal they wish to target with their child. Parent coaches assisted the participants with identifying the necessary steps in order to accomplish those goals and aided them in developing a goal-specific task analysis. Parent coaches discussed the difference between and long term and short term goal and guided parents in breaking down long term goals to target a component skill. If parents picked a long-term goal, the parent coaches asked the parents what are steps you could pick to reach that goal. Participants discussed their goals with each other and offered additional support when necessary. Family A chose to work on increasing approaches to mom and decrease challenging
behavior. Family B focused on increasing compliance with requests and decrease retreats from mom. Family C targeted increasing child approaches to dad and duration engaged with dad and activity. Family D worked on increasing approaches and duration child engaged with mom and activity. Family E chose to increase child’s tolerance of getting a haircut.

Before leaving, the parent coaches went over signs of success (e.g., gaining approaches), reviewed concepts introduced, and parents watched their previous video and discussed it with the coaches and others in the group. Once again, the parent coaches reminded the parents to listen, support ideas, and offer constructive feedback when discussing the videos and goals. Homework to aid in creating a healthy environment was assigned.

*Day 3: The Bounty.* The purpose of Day 3 was to educate parents on teaching strategies and skills to monitor progress, problem solve, and make data based decisions in the future. On Day 3, participants were shown a graph displaying the frequency their child approached them across weeks and the frequency of demands they placed. This exemplified to the group that they were making progress. Day 3 involved observation and measurement, an introduction to basic teaching, and discussing individual goal target behaviors. After the graph, an agenda was shown. The parents started the morning discussing signs of success and how to measure progress. The group practiced taking frequency data of approaches using a video of one of the parents from the group. Parent coaches discussed the different dimensions of behavior and showing graphs demonstrated measures that were most relevant to their goals (e.g., frequency and duration). Parent asked questions about the graphs regarding the specific target and why data increased or decreased at certain points. The parent coaches answered questions and explained the graphs more thoroughly when appropriate. Parents practiced choosing the most appropriate dimension based on examples provided and then discussed the examples as a group. The majority of day
three involved discussing and practicing teaching skills. The parent coaches emphasized interactive teaching: following child’s lead, imitated the child, and having fun while modeling and expanding language (Hart & Risley, 1999). Parents learned how and when to use a prompt and how to fade prompt when appropriate. Each parent filled out a worksheet regarding what prompt(s) would be appropriate to use based on their chosen goal and how they could fade the prompt(s). The functions of behavior were defined and parents watched a video to practice determining the function of a behavior. The video was a baseline video for a child’s target behavior and the parent of the child was in the group. Extinction was defined, a graph illustrating an extinction burst was shown, and the parents watched a video of a parent in the group when their child was having an extinction burst. The parent coaches emphasized how well the parent remained calm during the extinction burst and did not provide any attention until the child was calm. The last concept discussed on day three was shaping. The parents were provided several examples and guidelines for shaping. The parents filled out to help them determine steps in shaping for their goal and shared them with the group. Prior to leaving, the parents watched and discussed their videos from the previous week, reviewed major concepts from the first 2 training lectures and day three, and introduced homework for the week.

*Day 4: The Breakthrough.* The purpose of Day 4 was to discuss future goals for the family, provide additional resources, and celebrate their success. The final day was comprised of future goal targets, a recap of the previous training lectures, resources, and a satisfaction survey. Parents received a certificate, a card and a gift box filled with candy, a bouncy ball, and hand sanitizer. The agenda was shown and the day started with parents viewing their video and discussing from the previous week. Parent coaches reminded the parents to listen, support ideas, and offer constructive feedback when watching the videos and discussing progress for goals.
While parents were viewing their videos, parents took turns going into another room for their parent satisfaction interview. The questions were read to each of the parents separately in an office and audio-recorded. Parent coaches gave the parents time to ask questions and discuss progress with their goals as a group. A video of a parent from the group was shown to celebrate success of the program. The video demonstrated the parent building rapport and making progress with their target goal (i.e., gaining approaches). A recap of day one, two, and three was presented. Before leaving, parents were provided a list of book and online resources. Finally, participants scheduled follow-up sessions during day four.

*Home training sessions.* The parent coaches conducted weekly in-vivo training sessions in which participants were observed conducting a daily session with their child. The parent coaches provided corrective feedback and modeling for incorrectly performed procedures and praise for procedures correctly implemented. During these training sessions, participants were able to practice performing procedures, ask for assistance, observe correct models of procedures, and receive feedback on implementation. During training sessions, parent coaches focused on correcting skills that served as component skills to those targeted as goals by participants.

**Follow-up.** All participants were observed and rated four weeks after the final training lecture to ensure maintenance of training. The same procedures as outlined during baseline assessments were used. That is, no feedback was given during observations at follow-up assessments.
RESULTS

Four figures display the quantitative data. In each of the figures, the first phase represents the assessment taken during baseline, the second phase represents assessments completed each week of intervention, and the last phase is the assessment done at follow-up. In each graph, the x-axis displays the number of weeks (1-5). The qualitative results are discussed by theme.

Quantitative

Figure 1 represents group averages across 10-min assessments for coordinated joint attention measures and all ratings. From top to bottom, the graphs display the following: child affect, parent affect, parent confidence, parent stress, and coordinated joint attention (CJA). Child and parent affect, and parent confidence increased after the group parent coaching began and increased further at follow-up. The group average parent stress ratings showed a decreasing trend across assessments and decreased further at follow-up. Overall, the group averages for CJA increased.

The first four graphs of Figure 1 illustrate average ratings for child affect, parent affect, and parent confidence and stress. The y-axes for the remaining four graphs show the ratings (0-4). The first and second graphs of Figure 1 display the child affect and parent affect averages across assessments. During baseline, child and parent affect are negative, both with an average rating of 1.4 (range 0-2). After parent coaching begins, both child and parent affect jump up to neutral ratings. During Week 2, the average rating for child affect jumped to 2.6 (range 2-3) and the average rating for parent affect jumped to 2.4 (range 2-3). During Week 3 and Week 4 average ratings for child affect remained stable with both weeks having an average of 3 and increased slightly during follow-up with an average rating of 3.4 (range 2-4). During Week 3, parent average affect rating jumped to 3.4 (range 2-4) and decreased slightly during Week 4 with
an average rating of 3.2 (range 3-4). During follow-up, the average parent affect increased to 3.6 (range 3-4).

Graph 3 of Figure 1 displays average parent confidence ratings across weeks. During baseline, parent confidence ratings were low with an average of 1.0 (range 0-2). During the parent-coaching group confidence ratings continued a steady increasing trend with an average rating of 1.8 (range 1-3) during Week 2, 2.8 (range 1-4) during Week 3, 3.4 (range 3-4) during Week 4 and 4.0 at follow-up.

The fourth graph of Figure 1 illustrates the group average ratings for parent stress. During baseline, parent stress levels ranged from 2 to 4 with an average rating of 2.8. Following the start of group parent coaching, parents’ stress levels dropped in Week 1 having an average rating of 1.2 (range 0-2). During Week 3, average parent stress ratings continued to decrease with an average rating of 0.4 (range 0-2). Average parent stress ratings slightly increased during Week 4 with an average rating of 0.6. Average stress ratings decreased at follow-up with an average of 0.

The y-axis on the bottom graph shows the groups average frequency of coordinated joint attention (CJA). During baseline, the occurrence of CJA was low. The group averaged 6.4 instances of CJA during 10-min assessments, ranging from 0 to 22. After the parent-coaching program began, there was a slight increase in CJA, the group average increased to 6.6 instances of CJA, ranging from 1 to 16. During weeks 3 and 4, the average frequency of CJA continued to increase with averages of 8.2 (range 0-19) and 9.4 (range 0-26). At follow-up, the average frequency of CJA jumped to 14.2 (range 1-49).

For Figures 2-4, the top graph is always be the group average for that measure and the following graphs are by family in sequential order (Family A-E).
Figure 2 represents child and parent affect across assessments for all families. Across all graphs in Figure 2, the closed circles denote parent affect ratings and the open circles denote child affect ratings. The y-axis on every graph is ratings (0-4) of affect. The first graph in Figure 2 shows the group parent and child average affect ratings across weeks. During baseline, average parent and child affect were 1.4. After parent coaching had started, both parent and child affect increased. Parent affect increased to average rating of 2.4 during Week 2 and jumped to 3.4 during Week 3. There was a slight decrease in average parent affect ratings during Week 4 with an average rating of 3.2, but jumped up again at follow-up, 3.6. During Week 2, average child affect rating jumped up to 2.6, and then remained stable with an average rating of 3 for Weeks 3 and 4. At follow-up, affect increased with an average rating of 3.4.

The second graph of Figure 2 displays the parent and child affect for ratings for Family A across weeks. Child affect was negative in Week 1 with a rating of 1. During Week 2, following the beginning of the parent coaching, child affect rating increased to 2 and remained at 3 for Weeks 3 and 4. At follow-up, child affect stayed neutral, but decreased to a rating of 2. For Family A, parent affect ratings were neutral during baseline with a rating of 2. For Week 2, parent affect stayed neutral with a rating of 2. During Week 3, Week 4 and at follow-up, parent affect rating was a 3.

Family B is displayed in the third graph of figure 2. Child affect rating was neutral during baseline with a rating of 2. After parent coaching began, child affect ratings increased to 3 and remained stable for the remainder of the parent-coaching program. Again, at follow-up child’s affect rating was a 3. There was no immediate change in parent affect rating from baseline to the first week of the program with both having a neutral rating of 2. During Week 3, parent affect increased to positive a majority of the 10-min assessment with a rating of 4. Parent affect rating
decreased slightly in Week 4 with a rating of 3, but at follow-up parent affect rating increased to 4.

The fourth graph of Figure 2 shows child and parent affect ratings for Family C. Family C showed the largest jump. Child and parent affect ratings were a 0 during baseline. Child affect rating increased to neutral during Week 2 with a rating of 2 and remained at a neutral rating of 2 during Week 3. Child affect rating increased to a positive rating of 4 during Week 4. At follow-up, child affect was positive with a rating of 4. Parent affect followed a similar trend. Following baseline, there was a jump and affect rating increased to three. During Week 3, parent affect dropped slightly but remained neutral with a rating of 2. Mirroring child affect ratings, parent affect ratings were a 4 during Week 4 and at follow-up.

For Family D, child and parent had a neutral affect rating during baseline with a rating of 2. After the parent-coaching program started, child affect rating increased to 3 and continued to increase during Week 3 with an affect rating of 4. During Week 4, child affect dropped slightly with a rating of 3 but increased to 4 at follow-up. Parent affect remained neutral after the parent-coaching program started with a rating of 2 but jumped to 4 during Week 3. During Week 4 and at follow-up, parent affect ratings decreased slightly. The parent had a neutral affect with some instances of positive affect during the 10-min assessments giving them a rating of 3 for Week 4 and follow-up.

The final graph of Figure 2 displays child and parent affect ratings across weeks for Family E. Child affect was neutral during baseline with a rating of 2. Following the beginning of the parent-coaching program child affect rating increased to 3 and remained at 3 for Week 3. During Week 4, child showed neutral affect with a rating of 2, but jumped up at follow-up with a rating of 4. Parent affect was negative during baseline with a rating of 1. During Week 2, parent
affect rating jumped from 1 to 3. During Week 3, parent affect increased with a positive rating of 4. There was a slight drop during Week 3, but still remained positive with a rating of 3. At follow-up, parent affect mirrored child affect with a positive rating of 4.

Figure 3 represents parent confidence and stress ratings across assessments for all families. Across all graphs in Figure 3, the closed circles denote parent confidence ratings and the open circles denote parent stress ratings. The y-axis on every graph is ratings (0-4) of stress. The first graph in Figure 3 shows the group average ratings of parent confidence and stress across weeks. During baseline, the group ratings for stress were moderate with an average of 2.8 and group confidence ratings were low with an average rating of 1. Parent confidence increased gradually following the beginning of the parent-coaching program. Average confidence ratings increased to 1.8 during Week 2, 2.8 during Week 3, 3.4 during Week 4 and all parent had a rating of 4 at follow-up. While confidence increased, stress gradually decreased. Following baseline, parent stress ratings decreased with an average rating of 1.2. During Week 3, stress decreased dramatically with a rating of 0.4. During Week 4, stress slightly increased with an average rating of 0.6. At follow-up, all parents had a stress rating of 0.

The second graph of Figure 3 displays parent confidence and stress ratings for Family A. During baseline, parent confidence was low with a rating of 1. During Week 2, there was a slight increase with a rating of 2. During Week 3, parent confidence jumped to 4 and remained at 4 during Week 4 and at follow-up. Parent stress was moderate during baseline with a rating of 2. After parent coaching began, parent stress decreased to 1. During Week 3, parent stress jumped down to 0 and remained at 0 for Week 4 and at follow-up.

Parent confidence and stress ratings for Family B are displayed in the third graph of Figure 3. During baseline, parent confidence was a rating of 2 and remained at 2 during Week 2.
During Week 3, parent confidence increased with a rating of 3, and remained at 3 for Week 4. At follow-up, parent confidence was very high with a rating of 4. Parent stress was neutral during baseline with a rating of 2. After the parent-coaching program began, parent stress decreased with a rating of 1 for Week 2. During Week 3, parent stress dropped to 0 and remained at 0 for Week 4 and at follow-up.

The fourth graph of Figure 3 shows parent confidence and stress ratings for Family C. Parent confidence was very low during baseline with a rating of 0. Following baseline, when parent coaching began there was a slight increase with a rating of 1 for Week 1 and Week 2. During Week 4, parent confidence increased dramatically with a rating of 4 and remained high at follow-up with a rating of 4. During baseline, parent stress was very high with a rating of 4. Following the start of the parent-coaching program, stress decreased to a rating of 2 and remained at 2 for Week 3. Stress continued to decrease with a rating of 1 during Week 4 and 0 at follow-up.

Graph 5 of Figure 3 displays Family D. Parent confidence was neutral during baseline with a rating of 2. During Week 2, confidence decreased to 1 but jumped up to a high confidence rating of 4 during Week 3. During Week 4, there was a slight decrease with a rating of 3, but confidence was high at follow-up with a rating of 4.

The last graph of Figure 3 shows parent confidence and stress ratings for Family E. During baseline, parent confidence was low with a rating of 0, but jumped up following the start of the parent-coaching program with a rating of 3 for Week 2. During Week 3, confidence dropped slightly with a neutral rating of 2. At Week 4, confidence went back up with a rating of 3 and was high at follow-up with a rating of 4. Parent stress was high during baseline with a rating of 3. After the parent-coaching program started, stress immediately decreased with stress
ratings at 0 for Weeks 2 and 3. During Week 4, there was a slight increase with a rating of 1. At follow-up, parent stress was very low with a rating of 0. Overall, all parents showed an increase in confidence and a decrease in stress when parent coaching started and ratings remained in good standings at follow-up.

Figure 4 represents child coordinated joint attention (CJA) across assessments for all families. The y-axis represents frequency of coordinated joint attention. The top graph displays the group average with an average of 6.4 instances of CJA. Following the start of group parent coaching, CJA occurrences continued to increase with averages of 6.6, 8.2, 9.4, and 14.2 at follow-up, but overall results were variable across families.

Family A had 22 instances of CJA during baseline. During baseline, the child was requested and prompted to sit at a table. After parent coaching began, occurrences of CJA decreased each week. During Week 2 there were 16 occurrences of CJA and 15 during Week 3, but only 3 occurrences during Week 4. At follow-up, there was a slight increase of CJA from Week 4. During Week 4, there were 3 instances of CJA and at follow-up 7 occurrences.

The second graph depicts Family B. The frequency of CJA during baseline was low and remained low throughout the parent-coaching program and at follow-up with occurrences ranging from 0 to 2.

Family C showed the most dramatic increase in instances of CJA. The child had 3 occurrences of CJA during baseline and remained at 3 following the start of the parent-coaching program. However, during Weeks 3 and 4 the frequency of CJA increased with 19 in Week 3 and 26 in Week 4. Coordinated joint attention increased at follow-up with 49 occurrences.

The frequency of CJA for Family D increased from baseline and then showed some variability across weeks. During baseline, occurrences of CJA were low with 5 instances.
Occurrences of CJA doubled following the beginning of parent coaching with 11 instances of CJA. There was a slight decrease during Week 3 with 7 occasions. Coordinated joint attention returned to higher rates with 12 occurrences in Week 4 and CJA maintained with 11 instances at follow-up.

Coordinated joint attention for Family E was low during baseline and remained low throughout the group parent-coaching program with a range from 0 to 1. At follow-up, there was a slight increase with 3 instances of CJA.

Results from all families indicate an overall improvement across all quality measures during intervention assessments and maintained or improved at follow-up and variable results for CJA.

Qualitative

Parents’ satisfaction of the program was acquired during the parent interview. Parent reported feelings about the program and their child’s progress. Themes and representative comments of the qualitative results are shown in Table 9 and the complete parent interview transcript can be found in Appendix E. The qualitative data provided the researchers with information regarding the social validity of the program. Based on the parent interview the qualitative data was consolidated into four themes: relationships, family life, child skills, and group training.

Relationships. Each parent reported that the parent-coaching program improved their relationship with their child, especially having fun. Several parents talked about how they learned to play again and make it fun. This is a sample excerpt from Family C:

Right now, what my child has learned is that he can play with daddy without answering what’s their [sic] name, what color, do this, do that...so basically I think he’s enjoying
much more [sic] our time...I do full time work and by the time I get home I’m tired, but even in those short moments, it’s now quality time. It helped me improve my relationship with my kids, the child with special needs and neurotypical.

Relatedly, Parent D mentioned, “we take time to play, and it’s better than before. Now he really likes to come play with me because it wasn’t fun for him before and now it's fun for him.”

Parents recognized that their interactions are more enjoyable for them and their children and parent felt closer to their children. Parent E stated, “I think it’s brought us [her and her son] closer together...I think it’s easier for him to relate...and I think our interactions are closer.”

Similarly, Parent A said, “It really has helped me get more close to him.”

All parents discovered the importance of taking time to build rapport. Here is a sample excerpt from Family B:

I learned that I need to take some time out in front of the game to connect with [Child] and to play with him, and to get him on the same page as me. As far as having a good relationship in the house and with any requests I may be asking of him later on, [I learned] to ensure that we have a relationship before I ask him to do things.

**Family life.** Each family could only have one parent complete the entire coaching program, but all families reported an improvement in their family life. How the parent-coaching program influenced other members of the family was different for each family.

Parent A, Parent C and Parent D all felt that the program enhanced interactions with their child diagnosed with autism and interactions with their neurotypical siblings. Parent A reported, “He’s interacting with us [her and her husband] more, and more interactive with his brother and more affectionate to him as well.” Parent C not only gained more approaches from his child with autism once the parent program began, but also from his neurotypical daughter. He stated,
“looking at the videos I was getting a lot of approaches from my [neurotypical] daughter and she associates it with fun.” In addition, Parent C reported that his wife, who was unable to participate in the program, changed the way she was engaging with their son:

It also helped my wife when she’s engaging with my son not to probe too much...he got use to [a] cycle-what’s his name, what color this and that. He’s going to therapy like 4 days a week here. Just give him a break. Take time to have fun because it’s also a learning experience for him, but he doesn’t know.

Parent D talked about how it was difficult to get her son interested in playing before the parent-coaching program. Following training, she reported that her child with autism and her neurotypical son is more interested in playing. She realized, “how to make kids more interested, even [his] brother- in what we are playing with. You have to make the kid interested.”

Parent B was able to take on the liberty of sharing and teaching the techniques she learned to her husband. She felt that doing this improved their family life, “I think that’s improved [family life]. I’m able to prompt both... [my son and husband] in a situation."

Parent E talked about how the program improved her relationship with her child and the relationship between her and her husband. Her husband was able to attend the lectures and she felt, “my husband had the same experience and it’s strengthened our relationship...my husband and I have more confidence that we can do the ABCs, you know, the antecedent behavior and, consequence more effectively, and understand him [child] better, [sic] and understand how to model behavior for our child.”

Child skills. All families reported seeing an improvement in their child’s skills. Parents talked about making progress in their targeted skills and skills that were not specially targeted.
All parents talked about how approaches and engagement increased during playtime as a result of the parent-coaching program. Parent A stated, “he’s interacting with us more... he’s approaching me more...and more willing to try things I model for him.” Parents felt that their children enjoyed playing at home more with their toys and with mom and/or dad. Parent E proclaimed, “I think he’s [child] learning how to play more with me in more of a structured format”.

Three parents reported that they noticed an increase in their child’s vocalizations. Parent B felt she had a “much more vocal relationship” with her child and that overall vocalizations increased. Parents learned to be creative during play and include and build upon their child’s interest. An example excerpt from Parent D:

Looking back at the videos, I was taking the lead on it and I wasn’t getting a lot of responses from [Child Name] because we need to focus on getting the kid motivated. It’s very helpful with the way we can play with the kids at home. It’s not so demanding like ‘[Child Name] what do you want?’ ‘What do you want?’ It’s just demanding, you need go with it the way they want to go with it.

Overall, parents were learning to capture established skills, skills that the child displayed at the clinic, in their homes.

Group training. Although not assessed quantitatively, all parents found the group approach very beneficial. Parent B expressed, “it’s easy to be self-conscious with the beginning of a group situation...but I think you have to get over that in order to get benefits,” and Parent E found the “group setting more efficient than if we had not had it in a group setting.”

Parents enjoyed sharing their own experiences and hearing the experiences of others. During the training lectures, parents shared ideas of how to overcome problems and celebrated
their progress together. For example, Parent D stated, “we shared so much information and how we can work on things, and we get to hear ideas- it’s really helpful.” They were able to experience the journey together and support each other. “I just wish more parents could have came [sic] because the interaction is more, you know? You feel like you’re not the only one on this journey and then you could share and help, you could help a family,” Parent C explained. Parents developed rapport with each other and built their own support system. Parent E described this seamlessly, “I don’t have any other friends...that have children with autism... it’s very beneficial to hear the other families...all of us formed a closer relationship.”

The group setting provided a community of learning that may potentially aid parents in maintaining the skills they were taught. Parent E stated, “I would be surprised if some of us don’t follow up with each other and exchange emails and phone numbers and keep that collaboration going” and the parents did exchange emails and phone numbers prior to leaving the final training lecture.
DISCUSSION

The purpose of the current study was to evaluate the effects of a short-term, group-coaching program on quality measures such as parent and child affect, parent confidence and stress, and CJA. An earlier study measured direct skills and reported favorable outcomes of the same program (Vaughn, 2012). The results show that following the introduction of the parent-coaching program, parent and child ratings of positive affect increased, ratings of confidence increased, and ratings of stress decreased for all parents. Two of the 5 parent-child dyads demonstrated increases in coordinated joint attention. Furthermore, at follow-up all measures maintained or increased for each family. The parent interviews revealed that all families felt the parent-coaching program had improved their relationship with their child and enhanced other aspects of their family life.

As noted by Wolf (1978), it is important to examine quality variables that are most important to the individuals we serve. When working with parents of children with autism, one goal is to improve the family’s quality of life. Previous literature utilized formats such as ratings (Brookman-Frazee, 2004; Koegel, Bimbela, & Schreibman, 1996; Koegel, Symon, & Koegel, 2002), Likert scales (Ingersoll & Dvortcsak, 2006; Schertz & Odom, 2007), and parent interviews (Ingersoll & Dvortcsak, 2006; Schertz & Odom, 2007). They used these methods to assess quality, such as affect (Brookman-Frazee, 2004, Koegel, Bimbela, & Schreibman, 1996, Koegel, Symon, & Koegel, 2002), stress (Brookman-Frazee, 2004; Koegel, Bimbela, & Schreibman, 1996; Koegel, Symon, & Koegel, 2002), and confidence (Brookman-Frazee, 2004). The current study extended this research by employing all of the methods and areas in one evaluation package. Each area will be discussed separately.
Parent and child affect. The current study improved the quality of parent and child interactions. Specifically, both children and parents showed an increase in positive affect ratings across assessments. The building rapport and interactive teaching techniques were designed to teach the parents to follow their child’s lead and make interactions more fun. Parents were taught these techniques to help them gain approaches and promote interactions. Since, parents gained knowledge of what activities their children enjoyed and how to regulate and respond to their child this, may have increased the likelihood that parents and their children enjoyed their interactions more. Parent C discussed how the parent-coaching program changed the way his family approaches interactions, “now basically [we] show that we’re associated with fun... I’ve progressed from... asking my son to do this, now I’m getting that I should make it fun for him.” Along similar lines, Parent D explained that playtime is, “better than before. Now he really likes to come play with me because it wasn’t fun for him before, and now it’s fun for him.” Making interactions fun appeared to lead to more instances of positive affect for parents and their children.

Parent confidence and stress. The current study demonstrated that the parent-coaching program dramatically increased ratings of parent confidence and decreased parent stress. Ideally, parent-coaching programs will successfully teach parents skills, but also reduce stress during parent-child interactions. Across assessments parent stress ratings decreased apart from Week 4. During Week 4, three out of five parents had a slight increase in stress. The training lecture before that assessment contained a lot of information and it likely contributed to the slight increase in stress. Conversely, parent confidence showed an overall increasing trend throughout the parent-coaching program. This may be due to an increase in parent self-efficacy. During Week 3 (second group training lecture), parents were shown a graph presenting the frequency of
child approaches and frequency of parent demands. All parents were gaining more approaches and placing fewer demands on their child. Parents viewing the graph likely influenced parents’ self-efficacy and allowed parents to attribute their children’s successes to their own skill acquisition rather than other sources, an excerpt from Parent E illustrating this:

   I learned to have a little bit more confidence as a parent, and using ABA therapy, and knowing I don’t have to be a graduate student in the program to be effective using the techniques, and I learned just basic steps on how to take things slow with ABA. If [Child Name] isn’t doing something I’m trying to get him to do...[I learned] how to just take a couple steps back to get that baseline more established and to keep building from there.

Parents did not explicitly report that their stress levels were reduced as a product of the parent-coaching program. However, the data display stress ratings decreasing across weeks following the start of the parent-coaching program. Parents improved self-efficacy and increase in enjoyable interactions with their children may have influenced stressed ratings.

   Coordinated joint attention. Across families, the parent-coaching program coordinated joint attention (CJA) measures were variable. For family A, CJA decreased once the parent-coaching program started. This probably occurred because the parent no longer required the child to sit at a table during their interactions. Instead, mom focused on increasing independent approaches. There was no change across assessments for Family B or Family E. For Family C, coordinated joint attention increased dramatically across weeks. Specifically, during baseline, there were 3 occurrences of CJA and at follow-up, there were 49 occurrences. Family D had a slight increase in CJA across assessments.

   Previous parent training programs explicitly trained parents to respond to eye contact, in turn, increased CJA (Brookman-Frazee, 2004; Schertz & Odom, 2007). The current study did not
specifically teach parents to respond to child eye contact and this is likely the reason for the variable changes in CJA across families. The researchers provided the parents with a demonstration of CJA and showed video examples of CJA. This was a short-term parent-coaching program (four weeks) and CJA is complex. Teaching CJA behaviors requires parents to attend to and control antecedents and consequences. The parents involved in the current study were not yet ready to target such a complex skill. Instead, the parent-coaching package focused on training prerequisite skills for teaching CJA. Likewise, Schertz & Odom (2007) discussed the importance of “developing a foundation to support both symbolic communication and its precursor.” The current study focused on parents building rapport that can assist in the development of this “foundation.” The variability in CJA across families may be due to that fact that the parents and their children were not ready to work on CJA because they needed to further develop that “foundation.” These outcomes suggest that it is important to specifically train parents to respond to eye contact when interacting with their children. Future research should analyze the prerequisites that are needed prior to teaching parents CJA. Parents did not make any statements regarding CJA.

Parent descriptions. The current study utilized a parent interview on the final day of the parent-coaching group lectures, before follow-up. The interviewer asked questions regarding the overall satisfaction with the program, and parent observations regarding skills gained, logistical questions, and the relationship with their child and other relationships within the family. Schertz and Odom (2007) different methods to collect and analyze parent responses, recording initial interviews, weekly sessions, daily parent notes and satisfaction questionnaire. Their questionnaire was a 5-point Likert scale (1= strongly disagree, 5= agree) comprised of statements regarding satisfaction with specific procedures. In addition, Schertz and Odom (2007)
utilized specific software to examine the “convergence within and across the qualitative and quantitative data”. Conversely, the present study transcribed parent reports and organized them into emerging themes. Perhaps the current study allowed for more global information versus specific procedural reactions. For the purpose of the present study, this was important as we wanted to know if overall quality changes occurred as a result of the intervention.

The current study extended the literature by examining these quality measures. Overall, parent and child affect improved while parent confidence increased and stress decreased. Additionally, parents expressed they were satisfied with the program, indicating that the family quality of life improved. These findings are similar to past research, when taken as a whole (Brookman-Frazee, 2004; Ingersoll & Dvortcsak, 2006; Koegel, Bimbela, & Schreibman, 1996; Koegel, Symon, & Koegel, 2002; Schertz & Odom, 2007).

Future Directions

There are several methodological issues that can be addressed in future research. The number of observations, that is, one baseline, three intervention, and one follow-up data points, limits confidence in the current study. Filming may have influenced affect and parent stress and confidence. However, parent reports did not indicate discomfort with the observation process itself.

Another limitation of the current study is that many components were involved in the parent-coaching program. The researchers covered a lot of material each week and there is no means to determine which part(s) of the training was most effective. During the in home assessments the researchers noted that each parent seemed to focus on specific techniques or skills that were relevant to their home environment. For example, following Week 2, Parent A focused on engaging with their child’s preferred items in an interactive way, while Parent C
focused on identifying preferred items for their child. Each family began to make noteworthy progress in different ways and at different times once the parent-coaching program had begun. Future studies should systematically evaluate variables that may have contributed to the change in behavior.

The current study focused on investigating the effects of the parent-coaching program on parent-child interactions. It may have been worthwhile to explore the effect on interactions between other family members not directly involved in the coaching program. Parents reported that the parent-coaching program had effects on relationships with siblings and spouses. This parent-coaching program may have had broader effects. Extending the investigation may help determine if this program has positive effects on the entire family and their quality of life.

The group was designed to create a community of learning for the parents to help support one another and possibly aid in the maintenance of the skills they gained. Qualitative data indicated that this community of learning might have been created and that parents intend to provide each other with the support necessary to maintain the skills they learned. Parents voluntarily exchanged numbers and emails on the final day of training. Also, throughout training on Saturdays, parents consistently stayed after the lecture had ended to share resources, information regarding schools in the area, techniques that they were successful with, and personal information about their lives. Future research should conduct a survey following the coaching program to measure the degree to which parents stayed in contact.

It is also important to consider what variables lead to the development of a community of learning. A learning community is a group of people that share common emotions, values, and are actively engaged in learning together. Within the group, three different ethnicities were represented: Asian, Caucasian, and Hispanic. Every family and culture has their own style of
communicating and interacting with each other. Nevertheless, all of the families communicated openly and effectively throughout the group training lectures.

The present study adds to the current literature by evaluating a short-term group parent-coaching program utilizing an extended measurement package and interviews, quantitative and qualitative data. These data yielded positive results, which indicated an effective intervention and further extended the literature examining the use of mixed methods procedures.
Table 1

*Summary of Quality Measures Used from Previous Research and Current Study*

<table>
<thead>
<tr>
<th>Reference</th>
<th>Child Affect</th>
<th>Parent Affect</th>
<th>Parent Stress</th>
<th>Parent Confidence</th>
<th>Joint Attention</th>
<th>Parent Observations</th>
<th>Parent Satisfaction</th>
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<td>Brookman-Frazee (2004)</td>
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Table 2

*Observation Ratings of Parent Confidence*

<table>
<thead>
<tr>
<th>Low Confidence</th>
<th>Neutral Confidence</th>
<th>High Confidence</th>
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<tr>
<td>Parent appears unsure of how to gain approaches, interact with his or her child. Parent is not trying a number of different ways to get the child to orient towards them, approach them, and engage with them, with 2 or less instances within 10 min. sample. Parent statements reflect self-doubt in his or her perceived ability to have a positive interaction and impact on the child. Parent statements during interaction do not enhance their interaction with their child.</td>
<td>Parent does not appear uncertain or particularly certain during interactions. Parent has 3-4 instances of child orienting towards them, approaching, and engaging with them. Parent statements do not reflect self-doubt or high confidence.</td>
<td>Parent appears certain of how to gain approaches and engages with child a majority of the time. He or she may make deliberate choices of target behaviors or activities or seek teaching opportunities. Parent has 5 or more instances child orienting towards them, approaching, and engaging with them. Parent statements reflect self-efficacy in his or her perceived ability to have a positive impact on the child (i.e. lots of natural comments during play).</td>
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Table 3

*Observation Ratings of Parent Stress*

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<tr>
<th>Low Stress</th>
<th>Neutral Stress</th>
<th>High Stress</th>
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<tr>
<td>Parent affect reflects relaxed and/or calm while interacting with and teaching his or her child. Behaviors that characterize this type of affect may include exhibiting patience with his or child, using normal or enthusiastic tones of voice, laughing, and/or smiling.</td>
<td>Parent affect does not seem to be particularly relaxed or stressed. Voice is monotone or shoes little inflection.</td>
<td>Parent affect reflects frustration, agitation tension, or exasperation. Behaviors that characterize this type of affect may include exhibiting little patience with his or child, using a loud or sharp tone of voice, fidgeting, or slumping his or her shoulders.</td>
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Table 4

Observation Ratings of Parent and Child Affect

<table>
<thead>
<tr>
<th>Negative Affect</th>
<th>Neutral Affect</th>
<th>Positive Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent/child cries, pouts, frowns, pursed lip(s), scrunched up nose, and</td>
<td>Parent/child does not appear to be decidedly happy or particularly unhappy. May smile or frown</td>
<td>Parent/child smiles, laughs appropriately, and seems to be enjoying self. Score 4 if parent/child</td>
</tr>
<tr>
<td>scrunched eyebrows. Score 0 if unhappy majority of the time, score 1 if</td>
<td>occasionally but overall, seem rather neutral in this situation. Score 2 if neutral majority of the</td>
<td>appears to be happy most of the sample.</td>
</tr>
<tr>
<td>unhappy part of the sample, but neutral majority of it.</td>
<td>time, score 3 if neutral majority of sample but positive for part of the sample.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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</tbody>
</table>

Table 5

Coordinated Joint Attention (CJA)

<table>
<thead>
<tr>
<th>Coordinated Joint Attention</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Facial Orientation Shift which the child alternates facial orientation from:</td>
<td>In the case of peek-a-boo, song singing, tickling, or other social games, when the event ceases,</td>
</tr>
<tr>
<td>Activity/(group of) object(s)/person/event to Face then back to Same activity/(group of) objects/person/event</td>
<td>the child turns his or her facial orientation to the parent within 3 seconds</td>
</tr>
<tr>
<td>(the latency between each shift cannot be more than 3s)</td>
<td></td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td>Face to Activity/(group of) object(s)/person/event then back to Face</td>
<td>When the child sustains eye contact with the parent for at least 3 seconds and gestures or vocalizes</td>
</tr>
<tr>
<td>(the latency between each shift cannot be more than 3s)</td>
<td></td>
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<tr>
<td><strong>Note:</strong> if the child looks at the parent, then the camera before looking back at the activity that is still a</td>
<td></td>
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<tr>
<td>correct</td>
<td></td>
</tr>
</tbody>
</table>

* The end of a CJA shift sequence occurs when the child shifts to something different or more than 3-sec has occurred between shifts.
* Objects related to the activity such as those in the parents hand in a task where the parent is handling object one by one to the child as the same "group of objects"
Table 6

The ABC’s of Playing, Learning, and Growing Together Feedback Interview

Interviewer: Greet the parent and welcome them to have a seat and make themselves comfortable.

“I will be asking you questions about your experience with the ABC parent-coaching program. Your answers will remain anonymous and will only be used to help us improve the program. It is important for us to understand what you found helpful and what suggestions you might have to improve the group.”

Part I. First, can you describe your experience and your general impressions of the ABC program?

Part II. Next, there are a series of specific questions that we would like your input. (Note to interviewer: don’t ask particular questions if they told you in Part I)

1. What did you learn from the ABC program?
2. What did your child learn?
3. Do you think the program had an effect on your relationship with your child? If yes, how?
4. Do you think the program had an effect on other relationships within your family? If yes, how?
5. In your opinion, was the length of the parent-coaching program, 4-weeks, too short, just right, or too long?
6. In your opinion, was the number of hours per week (2.5 hours on Saturday and 1 hour in home during the week), too short, just right, or too long?
7. Please share what you would change, if anything, in regards to the number of sessions, length of sessions, and overall length of parent-coaching program.
8. Did you feel like picking a goal for your child and working on it with the parent coaches was worthwhile?
9. As a parent, were the techniques you learned beneficial?
10. Were the power point presentations helpful?
11. Did you find the activities and videos valuable?
12. Was it beneficial to be in a group setting? Why or why not?
13. Do feel the ABC parent coaches were professional and knowledgeable?
14. Did the ABC parent coaches provide you effective feedback?
15. Did the ABC parent coaches communicate clearly throughout the training?
16. Were the ABC parent coaches approachable?
17. What did you like best about the ABC parent-coaching program?
18. What did you like least about the parent-coaching program?
19. Would you recommend the ABC parent-coaching program to other parents?
20. Is there anything else you would like to add?

Interviewer: “Thank you so much for taking the time to provide feedback on the ABC parent-coaching program.”
Table 7

*Sequence of Group Parent-Coaching Program*

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>FU</th>
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</thead>
<tbody>
<tr>
<td>Intake</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment (video)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Group Training Lectures</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Home Training Sessions</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Table 8

Outline for Parent-Coaching Program

**Day 1: The Basics**
- Agenda
- Who are we?
- Getting to know each other
- Goals of Program
- Program Sequence
- ABA in Nutshell
- ABC’s of Behavior
- APA Approach
- Group Approach
- Family Goals
- Video/Goal Discussion
- Homework

**Day 2: The Bond**
- Agenda
- Review
- Reinforcement
- Positive Reinforcement
- Reinforcers
- What is Rapport?
- Why is Rapport Building Important for Kids with Autism?
- Steps in Rapport Building
- Creating a Healthy Environment
- Arranging the Environment
- Joint Attention
- Delivering Reinforcement
- Expanding Reinforcers
- Signs of Success
- Video/Goal Discussion
- Recap
- Homework

**Day 3: The Bounty**
- Agenda
- Signs of Success (Measuring Progress)
- Data Collection
- Introduction to Basic Teaching
- Interactive Teaching
- The Teaching “Dance”
- Prompting
- Prompt Fading
- Functions of Challenging Behavior
- Extinction
- Establishing Instructional Control
- Shaping Behavior
- Video/Goal Discussion
- Recap
- Homework

**Day 4: The Breakthrough**
- Agenda
- Video/Goal Discussion
- Where do we go from here?
- Review
- Resources
- Homework
Table 9  

*Themes and Representative Comments from Parent Satisfaction Interviews*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Representative Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent A</td>
<td>It really has helped me get more close to him and I just want to thank everyone who made this possible.</td>
</tr>
<tr>
<td>Parent B</td>
<td>He learned that he could have fun at home and play with me. It's a more positive relationship.</td>
</tr>
<tr>
<td>Relationship</td>
<td>Parent C</td>
</tr>
<tr>
<td></td>
<td>Parent D</td>
</tr>
<tr>
<td></td>
<td>Parent E</td>
</tr>
<tr>
<td>Parent A</td>
<td>He's interacting with us more and more interactive with his brother and more affectionate to him as well.</td>
</tr>
<tr>
<td>Parent B</td>
<td>I think that's improved [family life] I'm able to prompt both of them in a situation.</td>
</tr>
<tr>
<td>Family Life</td>
<td>Parent C</td>
</tr>
<tr>
<td></td>
<td>Parent D</td>
</tr>
<tr>
<td></td>
<td>Parent E</td>
</tr>
<tr>
<td>Parent A</td>
<td>He's approaching me more and more open to me and willing to try things that I model for him.</td>
</tr>
<tr>
<td>Parent B</td>
<td>Child increased talking, much more engaged with me...more vocal relationship</td>
</tr>
<tr>
<td>Child Skills</td>
<td>Parent C</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 9 (continued)

Themes and Representative Comments from Parent Satisfaction Interviews

<table>
<thead>
<tr>
<th>Themes</th>
<th>Representative Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent A</td>
<td>Helpful to hear other experiences and get suggestions from other parents, I think it's really helpful.</td>
</tr>
<tr>
<td>Parent B</td>
<td>Especially good to hear what other families are dealing with because you can figure out if some of the success they've had you can apply to your own life.</td>
</tr>
<tr>
<td>Group Training</td>
<td>Parent C You feel like you're not the only one on this journey and then you could share and help, you could help a family.</td>
</tr>
<tr>
<td></td>
<td>Parent D We shared so much information and how we can work on things and we get to hear ideas, it's really helpful.</td>
</tr>
<tr>
<td></td>
<td>Parent E I don't have any other friends that have children with autism, very beneficial to hear the other families...All of us formed a closer relationship.</td>
</tr>
</tbody>
</table>
Figure 1. Group averages across all ratings and CJA measures. Affect ratings are based on 5-point Likert scale (0=negative 4=positive) and confidence and stress ratings are based on 5-point Likert scale (0=low 4=high).
Figure 2. Child and parent affect ratings across assessments for all families. Ratings are based on 5-point Likert scale (0=negative 4=positive).
Figure 3. Parent confidence and stress ratings across assessments for all families. Ratings are based on 5-point Likert scale (0=low 4=high).
Figure 4. Child coordinated joint attention across assessments for all families.
APPENDIX A

ABC FLYER

Co-authored by Brittany Vaughn and Amber Wiles.
The ABC’s of Playing, Learning, and Growing Together

SATURDAYS
9:30 AM – 12:00 PM
AUGUST 4\textsuperscript{TH}, 11\textsuperscript{TH} & 18\textsuperscript{TH} & SEPTEMBER 1\textsuperscript{ST}
NO COST
CHILD CARE PROVIDED
SUPERVISED BY: DR. SHAHLA ALA’I-ROSALES
AT UNIVERSITY OF NORTH TEXAS

PARENT TRAINING

ABC will focus on improving relationships and skills.

In a supportive group setting, parents will learn the basics of Applied Behavior Analysis, skills to build stronger rapport with their child, and establish specific goals to improve quality of life in home and community. ABC is an evidence-based intervention that focuses on meaningful changes for your child and family.

The ABCs of a great relationship.

Contact Sara Weinkauf, M.S. B.C.B.A For More Information.

* MUST ATTEND every Saturday.
APPENDIX B

ADDITIONAL INFORMATION PACKET

Co-authored by Brittany Vaughn and Amber Wiles.
ABC is a parent-training program that aims to expand parent-child relationships, teach new skills, and improve families’ overall quality of life. In a supportive group setting, parents will be able to choose specific goals to work on with their child and receive coaching targeted towards achieving those goals. Parents will learn how to take an Applied Behavior Analysis (ABA) approach toward choosing goals, achieving goals, and monitoring progress of those goals. Videos of parent-child interactions will be taken and parents will have the opportunity to learn and grow from watching and evaluating their own experiences. There will also be the opportunity for parents to learn ways to expand their child’s play skills, create healthier environments, and improve overall interactions with their child.

What is ABC?

Saturdays 9:30am-12pm
August 4th, 11th, 18th, and September 1st

Dr. Shahla Ala’i-Rosales, BCBA-D, will be overseeing the program. Dr. Rosales is an associate professor of behavior analysis at The University of North Texas. She is the director of the North Texas Autism Project, and is known for her research and success in treating autism through applied behavior analytic techniques. Dr. Rosales has over 25 years experience providing services to children with autism and their families.
Amber Wiles and Brittany Vaughn will be your group coaches. Both are Master’s students at UNT and have extensive experience working with children with autism. Amber and Brittany are ABA coaches at Easter Seals.

What is the program sequence?

**Baseline**
- 1 video prior to program

**4 Group Sessions**
- Saturdays 9:30am–12pm

**3 In-home Sessions**
- Scheduled during the week

**1 Follow-up Session**
- Scheduled 1 month after

Prior to the group meetings 1 video will be taken at home. A 10-minute parent-child interaction will be filmed. The videos taken will be viewed and discussed during the group sessions. At first you will watch the videos on your own and then in small groups. Videos will also be taken each week between group meetings. Following the completion of the group sessions, a follow-up meeting will be scheduled.
What will we talk about?

- What is Applied Behavior Analysis?
- ABC's of Behavior
- Goal Setting
- Identifying Reinforcers
- Rapport Building and Play
- Creating a Healthy Environment
- Shared Control and Contingencies

Who do I contact with more questions?

If you have any other questions prior to signing up for ABC feel free to contact:

Brittany Vaughn

[Contact Information]
APPENDIX C

POWER POINT® PRESENTATIONS AND ACCOMPANYING WORKBOOK PAGES

Co-authored by Brittany Vaughn and Amber Wiles.
Day 1: The Basics
Brittany Vaughn and Amber Wiles

Who are we?
- Master's students in the Department of Behavior Analysis at UNT
  - From the Midwest
  - Dog lovers
  - Sports fans
  - Passion for working with children
- Shelia Arai-Rosales, Ph.D.

What's your story?
Getting to know each other

Who are you?
What is your name?
Where are you from?
What do you do?
What are your goals?
What are your hopes & dreams?

What are your interests?
What are your hobbies & interests?

Find a partner and fill out this sheet with their information.
You will introduce your partner to the group.

Goals of ABC
- Gaining Approaches
- Improving Relationships
- Gain Skills
- Enhance Quality of Family Life

Learning the ABC's of a great relationship

Program Sequence
- Baseline: 4 video prior to program
- 4 Group Sessions
- 3 In-home Sessions
- 1 Follow up Session

Agenda
- Welcome
- What is Applied Behavior Analysis?
- ABC's of Behavior
- Group Collaboration
- Family Goals
- Videotape Viewing and Discussion of Strengths
ABA in a Nutshell

- Collaborate with team
- Emphasize on research based procedures
- Increase parents knowledge of ABCs through direct observation & data analysis

Socially significant/ target behavior change to improve quality of life for children & others involved.

- Strengths, implementation, & evaluation to ensure effectiveness.

ABC’s of Behavior

- Antecedent?
- Behavior?
- Consequence?

Sally was walking around the room playing alone. Mom called her name and when she stopped and glanced at her mom, Mom smiled at Sally and tickled her tummy.

Antecedent?
Behavior?
Consequence?

Andrew’s parents are working on increasing his play skills. They gather his favorite toy (a truck) and beg to play with it in front of him. They model a few appropriate comments (vroom, beep, beep, etc.) and instruct him hand the truck to Andrew. Andrew takes the truck, moves it back and forth and says “vroom”. Andrew’s parents smile, high five him, and continue to play with their son.

Antecedent?
Behavior?
Consequence?

ABA Approach

- Identify Goals: Target behaviors to change, Develop a plan
- Implement Change: Follow through with plan as developed, Take data
- Evaluate: Analyze effects and make changes as necessary

Group Approach

- Collaborative: Constructive feedback and advice welcomed, Listen respectfully
- Open and Honest: Stories, ideas, & opinions shared, There are no errors, only learning opportunities
- Understanding: Considerate of others and their place in this journey, Offer support for others hardships

Our kiddos come first!

- Person centered planning & supports
- Positive interventions
- Behavior is affected by environmental variables
- Behavior is learned & can be taught.
- Data collected for active decision making on interventions’ effectiveness.

Example:

Sam was playing alone and started saying “o-o-o”. Grandma rushed over and exclaimed, “Yes, o-o-o” and handed Ric his favorite toy.

Antecedent?
Behavior?
Consequence?

Brady screams and hits his hand whenever his parents start to teach him a new activity; putting on his clothes. As soon as he begins to scream and hit they stop.

Antecedent?
Behavior?
Consequence?
Purpose of ABC

Your Goals
- Choose Goal
- Decide How to Monitor
- Develop a Plan
- Implement Plan

Our Plan
- Group Support
- Demonstrate and Practice Strategies
- Answer Questions
- Support Implementation

Family Goals

What do you want to stay the same?
- What are your and your child's strengths?

What do you want to change?
- How often does it occur?
- What does it cause?
- Why does it occur?

What do you need to accomplish goals?
- What support do you need? From us, from the group, from teachers, from others

Goal Discussion
REMEMBER:

Listen
Support Ideas
Offer Constructive Feedback

Video Discussion

Homework

- Before you leave today schedule filming time
- Continue to think about your goal
- Finish Goal Sheet
- Review workbook before next time
- Locate items your child likes to bring next week (does not have to be a “toy”)

Filming Time

Next Filming Time:
Day: _____
Time: _____
With Amber & Brittany
If you need to reschedule please call
Day 2: The Bond
Brittany Vaughn and Amber Wiles

Recap

ABA
- Science of behavior in natural environment
- Direct observation & measurement
- Lasting and meaningful outcomes

ABC’s
- Antecedent
- Behavior
- Consequence

Working Together
- Collaborative
- Open and Honest
- Understanding

Positive Reinforcement

Definition: A consequence delivered after a behavior and the future likelihood of that behavior increases.

Can be thought of as adding something to increase a response.

You tickle your child and they laugh with you, you tickle them more often in the future.

Reinforcement ABC’s

What are examples of positive reinforcement in your life?
1. 
2. 
3. 

Behavior Change: Increase
More on Reinforcement

**Reinforcer**
- Something that occurs after a behavior & increases the future likelihood of that behavior.
- Different for everyone
- Need to be changed frequently to maintain their effectiveness

---

Reinforcers

How do we identify what might be reinforcing to someone?

- Observe them across a variety of settings
- Ask others
- Reinforcer survey
- Momentary effectiveness

---

Woah...It works!

**Following instructions**

<table>
<thead>
<tr>
<th>Days</th>
<th>Baseline</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>1</td>
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</tbody>
</table>

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What is Rapport?

“We say that two people have established rapport when their relationship is characterized by closeness, empathy, and mutual liking”

(Bar, Leah; McCormick, Corton, Kemp, & Smith, 2004, p. 111)

---

Why is Rapport Building Important for Kids with Autism?

- Autism
- Deficits in Social Skills
- Target Rapport Building

Our focus is on the parts of rapport building that have to do specifically with your child’s autism to enhance the bond you have with your child.

---

Why Build Rapport?

- Increases likelihood of participation in family activities
- High levels of “happiness” / Low levels of “unhappiness”
- Positive experience for both people involved
- Decreases likelihood of problem behavior

(Whitaker & Cat, 2011)
Step 1: You=FUN!

Gather Preferred Items
- Items/activities the child has reliably approached or asked for in the past

Play
- Provide items/activities non-contingently
- Engage in exciting, interactive play your child enjoys
- No Demands

Step 2: Let’s Play Together

- Do not deliver items to child unless they approach you
- Engage in highly interesting ways for your child

When child approaches, provide access to all fun things!!

Throw a Party

Steps in Rapport Building

Step 1: Make yourself into a source from which to obtain reinforcement

Step 2: Make yourself into a signal for approach and simple communication.

Level A: Require that your child approach you to gain access to the reinforcers

(Carr et al., 1984)

Level B: Require that your child request to gain access to reinforcers

List preferred activities and items for your child:
This may include toys, games, events, locations, & topics of conversation

Make item available
Provide item/ activity
Engage in high energy
Engage in interactive play

Now Let’s Practice

Step 2: Let’s Play Together

Use list of preferred activities and items for your child

Withhold access
Get child interested in the items/interacting with you
Engage in high energy interactive play

When child approaches, throw a party

Let’s Practice
Creating a Healthy Environment

You and your child are playing. Your child looks at a ball and starts walking towards the ball. How can you capitalize on your child's interest?

You and your child are playing with a toy. The child does not seem interested in the toy. What can you do?

You and your child are playing a board game. What are some goals that you can work on?

Arranging the Environment

Choose Play & Learning Areas

Withhold or delay provision of expected/desired objects or events

Choose Play & Learning Areas

Engagement

High level, Variety, Other choices

Delivering Reinforcement

Contingent Immediate

Make it fun Social

Rotate materials Variety

Joint Attention

Focus on developmental competencies:

Joint Attention Video

Expanding Reinforcers

Pair yourself with new items

Pair new reinforcers with existing ones

Gradually shorten time with old reinforcers and increase time with new items

Expanding Activities Video
Expanding Reinforcers

The student likes play-dough, but doesn’t like toy cars. You want to try to expand reinforcers. Try rolling the toy cars through the play-dough, making cars out of play dough, etc. Every time the child earns play-dough, they also play with toy cars either before or after the play-dough. Gradually shorten the play-dough time and increase the cars time. Stand in awe as the child selects toy cars from the reinforcer menu on their own.

Let’s Play!
Grab a couple toy and let’s work on expanding reinforcers

Video & Goal Discussion
REMEMBER:

Listen Support Ideas Offer Constructive Feedback

Homework

• Arrange a space for social interactions.
• Schedule a playtime.
• Limit distractions.
• Rotate toys/activities.

Recap

Day 1 Day 2

Don’t forget your IM’s Look for meaningful change
Identify potential reinforcers Arrange the environment Reinforce approaches

Filming Time

Next Filming Time:
Day: ______
Time: ______

With Amber & Brittany

If you need to reschedule please call [REDACTED]
The ABC's of Playing, Learning, and Growing Together

Day 3: The Bounty
Brittany Vaughn and Amber Wiles

Agenda

- Signs of Success
- Introduction to Basic Teaching
- Group Goal Training
- Individual Goal Coaching Sessions
- Group Goal Discussion
- Recap

CONGRATULATIONS!!

Signs of Success
(Measuring Progress)

- Identify Target
- Ideas for counting
- Practice on videos

Data Collection Practice

Target Behavior (Approach):
Child comes within 2 feet of parent

Data Collection

Collecting data on behavior can be done in a variety of ways.
Behavior may be looked at in more than one dimension.

Dimensions of behavior:
- Frequency
- Duration
- Topography
- Inter-occasion time (ITT)
- Latency

How to collect data?
Introduction to Basic Teaching

- "Come here"
- Behavior

- Child Approaches

- Balance Changes

- Consequence

The Teaching “DANCE”

Decide
- What are your teaching goals?
- What environment will you teach in?
- How will you break goals into achievable units?
- Is this a good teaching moment?

Arrange
- Do you have highly preferred items or activities?
- How will you regulate access to these items or activities?
- How will you use and fade prompts?
- Are you at the student’s level and working?

Now
- Is your response to progress immediate, generic, & contingent?
- Are you keeping track of progress?
- Are you looking for responses on the goal list?

Count
- Are goals behaviorally measured in a way that allows you to see progress over time?

Enjoy
- Is everyone having fun?
- Are you alternating demands and reinforcers?

Interactive Teaching

- Do you have your child’s full attention?
- Do you have your child’s interest?
- Are you providing feedback?

What happens if....?

Behavior
- “What color?”
- No response
- ???

Prompting

Added stimuli following the instruction to elicit a correct response

- Attention gained before initial instruction delivered
- Approx. 2-4 seconds opportunity to respond
- Prompts given as necessary
- Prompts stopped when correct response made
- Fade prompts as soon as possible

Prompting ABC’S

- “What color?”
- “Red”
- Child says, “Red”
- Deliver praise + reinforcer
**Types of Prompts**

**Physical:**
- Full physical guide child through task
- Partial physical guide child initiates portions of task
- Touch, light tap on arm to start task

**Verbal:**
- Direction: verbal cue to child for what to do ("noop")

**Gestural:**
- Pointing: point to something in environment

**Pictorial:**
- Picture or symbol acts as a cue

**Positional:**
- Targeted response may be moved closer to child or made more obvious

**Model:**
- Demonstration of behavior targeted

---

**Prompt Fading Example**

Fading the physical prompt of guiding a child’s hands may follow this sequence:

1. Supporting wrists
2. Touching hands lightly
3. Touching forearms or elbows
4. Withdrawing physical contact altogether

---

**Functions of Challenging Behavior**

**Attention**
- Ignore CB
- Teach appropriate attention getting response

**Escape**
- Demand less difficult/less work?
- Do not allow escape for CB

**Tangibles**
- Do not give access to tangibles when CB occurs
- Teach child to request what they want
- Eventually teach to accept "no" as an answer

**Self-Stimulatory**
- Replacement behaviors
- Appropriate times/place

---

*Let's Practice*

Work on fading prompts for your specific goal and others
Extinction

- A reinforcing consequence that previously followed a behavior is removed
- This behavior significantly decreases over time
- Generally associated with extinction bursts
- Extinction burst: temporary increase in frequency, intensity, and/or duration of the behavior

Extinction Burst

Duration of Crying

Establishing Instructional Control

- Reward positive behavior
- Ignore negative behavior
- Follow through with demands
- Set limits and consequences
- Intervene only if necessary

Junk Behavior

- What is Junk Behavior?
  - NOT physically harmful to persons
  - NOT physically harmful to property
  - Frustrating

- Why does my child engage in Junk Behavior?
  - To get attention
  - To get a reaction
  - To get you to do something

- What should I do?
  - Ignore the Junk behavior
  - Immediately give your attention to another person or activity
  - Say NOTHING about the Junk Behavior

Shaping Behavior

- Definition: reinforcing steps to a target behavior
- Target behavior is infrequently or never displayed by child

- Build desired behavior in steps and reward those behaviors that come progressively closer to the final goal
- As your child masters each sub-step, you require that s/he move to the next step in order to receive reinforcement

Shaping

- Placing glasses in proper position
- Teaching glasses
- Practice glasses
- Practice glasses
**Shaping Guidelines**

1. Select the end goal
2. Decide the criterion for success
3. Identify the first behavior to reinforce
4. Eliminate interfering or extraneous things in environment
5. Proceed in gradual stages
6. Stop reinforcement for previous steps
7. Continue reinforcement when the goal is achieved

**Communication**

**Goals:**
- Increase number of requests
- No communication with words
- Teach appropriate ways to get desired items
- Increase social/positive communication opportunities

**Let’s get talking!**

**Antecedent:** Child approaches or reaches for item
- Withhold item with expectant look and wait for response

**Behavior:**
- Child makes eye contact, a vocalization, gesture, or sign, etc.
- Child does not respond

**Consequence:**
- Deliver item/activity and expand vocalization
- Provide a model (prompt)

**Shaping Practice**

- What is your end goal?
- When will you move to the next step?
- What are your rules?

**Where do we start?**

- Begin to require sounds that more closely resemble requested item
- Require only sounds related to the item
- Require full sentences

**Expanding:**

**Examples**

- **Spinning around**
  - “Go”
  - “Spin”
  - “More spin”
  - “Spin me around”
  - “Spin me around again”

- **Bloowing Bubbles**
  - “Blow”
  - “Bubbles”
  - “Bleow bubbles”
  - “Blow more bubbles”
  - “I want more bubbles”
Homework

- Schedule next filming session.
- Don’t forget The Teaching “DANCE”
- Continue to work on your goal.
- Practice taking data.
- Have fun! See you in two weeks!

(9-1-12)
The ABC's of Playing, Learning, and Growing Together

Day 4: The Breakthrough
Brittany Vaughn and Amber Wiles

Goal Discussion
REMEMBER:

- Listen
- Support Ideas
- Offer Constructive Feedback

Agenda
- Videotape Viewing and Discussion
  - Where do we go from here?
  - Recap
  - Resources
  - Schedule Follow-up
  - Survey

GOOD JOB!!!

Where do we go from here?

- GOALS
  - Continue to work on current goals
  - Start looking for new goal areas

- TEACHING
  - Get approaches and engagement
  - Start with measured steps then interspers new targets

- CHALLENGING BEHAVIOR
  - Ignore/Shift
  - Extinction
  - Teach/Replace inappropriate behavior

- RAPPORT
  - OUSING!!
  - Remember to have fun!

Recap
- Bond
  - Look for the ABC's
  - Identify goals, decide how to monitor, develop & implement plan.

- Basics
  - Identify, vary & expand reinforcers
  - Assign environment
  - Have fun!

- Bounty
  - DANCE!!!
  - Acknowledge Signs of Success.
Resources: Books

- A Work in Progress
  - Edited by Ken Leaf and John McNulty
  - How to develop an ABA program, teaching social skills & communication

- Behavioral Intervention for Young Children with Autism
  - Edited by Catherine Maurice, Gini Green, and Stephen C. Luce
  - A Manual for Parents and Professionals

- Making a Difference
  - Edited by Catherine Maurice, Gini Green, and Richard Ross
  - Follow up to 1996 version, more techniques

- Pivotal Response Treatments for Autism
  - By Robert L. Koegel and Lynn Kern Koegel
  - Natural learning opportunities to teach communication & social skills

- Teaching Social Communication to Children with Autism
  - By Brooke Ingemson and Anna Drantback
  - A parent manual for teaching social communication skills

Resources: Personal Experiences

- Facing Autism: Giving Parents Reason for Hope & Guidance for Help
  - By Lyn M. Hamilton

- Let Me Hear Your Voice: A Family’s Triumph Over Autism
  - By Catherine Maurice

- Overcoming Autism
  - By Lynn Kern Koegel and Clair Ludden

Resources: Websites

- Autism Speaks
- The Florida Autism Recovery Network
- The Autism Society of America
- Autism Research Institute
- Families for Early Autism Treatment

Homework

- Continue to work on goals and monitor progress.
- Feel free to contact us with any questions you may have.
- Have fun!

Follow-up Appointment:

Day: _____
Time: _____
With Amber & Brittany
If you need to reschedule please call: _____
APPENDIX D

ABC PARENT COACHING PROGRAM CHILD GOAL BEHAVIOR DATA SHEETS

Co-authored by Brittany Vaughn and Amber Wiles.
Date Scored: __________  Date of Video: __________
Primary Initials: __________  Child Initials: __________
Secondary Initials: __________

Circle or highlight the appropriate rating.

<table>
<thead>
<tr>
<th>Parent Affect</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
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<tbody>
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<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Parent Confidence</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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**Coordinated Joint Attention**

For each occurrence of coordinated joint attention (CJA), place a tally mark in the one-minute row it was observed. If there is no CJA for the minute, check the NO box at the beginning of the row.

<table>
<thead>
<tr>
<th>Minute</th>
<th>NO (none)</th>
</tr>
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<tbody>
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<td>9-10</td>
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</table>
APPENDIX E

PARENT FEEDBACK TRANSCRIPT
First, can you describe your experience and your general impressions of the ABC program?

Parent A | We’ll it was really good for us, with our children and for our son. I really liked it was really good.

Parent B | Very helpful, very good use of our time which is saying a lot, it hard to give up sat morning. [Child] increased talking, much more engaged with me, found it helpful to review important concepts we come across a lot in our regular parent training but its like a boot camp, concentrated and then you get this practical experience with having the play session once a week. Where we can review where those skills are going and have a reminder about things to help with engagement.

Parent C | General impression I’m completely satisfied. I wish they had started this earlier. It would have benefited a lot of families in my opinion because it has benefited me and the rest of my family and the way we now approach...we now basically show that were associated with fun and that is what I take away from this seminar. I’ve seen how I’ve progressed from being like a probe of asking asking asking my son to do this. Now I’m getting that I should make it fun for him. General impression it’s pretty good I’m happy with the experience and I wish [Clinic Name] or you folks would do this again for some other families because even if I already took it, I don’t mind coming back again. And the bottom line is I’m pretty impressed. I really like it and it’s helpful to us families. I know for them it’s just a thesis but for us families living with kids with autism I’m taken back.

Parent D | I really liked the program. Before the program when I use to take time to play with him it was not that helpful now he’s more interested, even brother, more interested because I got some tips on how to make kids more interested even brother in what we are playing with, you have to make the kid interested. Looking back at the videos, I was taking the lead on it and I wasn’t getting a lot of responses from [Child Name] because we need to focus on getting the kid motivated. Its very helpful with the way we can play with the kids at home. It’s not so demanding like [Child Name] what do you want what do you want? It’s just demanding you need go with it the way they want to go with it. It’s very helpful.

Parent E | I think it’s a wonderful experience it’s been very targeted. We were given very specific goals to accomplish and in regard to helping our son get more comfortable with clippers for haircut was on one of the main targeting things we’ve been working on and then just the overall program has been just been very good and I think it should be offered again for other parents who couldn’t be in this group and I think a lot of parent in this group would like another program. So I would say overall it’s been an excellent experience.

What did you learn from the ABC program?

Parent A | Particularly I found the ABA therapy you can get more out of it by doing it at home.

Parent B | I learned that I need to take some time out in front of the game to connect with [Child] and to play with him and to get him on the same page as me. As
far as having a good relationship in the house and with any requests I may be asking of him later on. And to ensure that we have a relationship before I ask him to do things.

Parent C  I know it’s a simple but its difficult when you’re dealing with a kid with autism, but my son has a sibling and looking at the videos I was getting a lot of approaches from my daughter and she associates it with fun and right now she has soccer practice but I told her this is the last day and she said dad let me think about it because I want to go back because I’m having so much fun. Imagine that, she’s not a participant but she’s associating the fact that sessions here are fun. So ya that’s the one thing I learned associate it with fun.

Parent D  With watching the videos and getting the feedback, it was helpful with making progress but the main thing I learned was how to play with your kid. And make small goals and make it small tasks. When you have one goal break in into smaller parts and just keep making progress.

Parent E  I learned to have to a little bit more confidence as a parent and using ABA therapy and knowing I don’t have to be a graduate student in the program to be effective using the techniques and I learned just basic steps on how to take things slow with aba. And if [Child Name] isn’t doing something I’m trying to get him to do and how to just take a couple steps back to get that baseline more established and to keep building from there.

**What did your child learn?**

Parent A  He’s interacting with us more.

Parent B  He learned that he could have fun at home and that he could play with his things and with me and on his own.

Parent C  Okay [Child] right now what my child has learned is that he can play with daddy without answering what’s their name, what color, do this do that...so basically I think he’s enjoying much more our time. Even though I do full time work and by the time I get home I’m tired but even those short moments it’s now quality time.

Parent D  We are getting some more vocals from him and with playing we are making progress there too.

Parent E  I think he’s learning how to play more with me, with me in more of a structured format where he kinda knows what the expectations are and with our interactions. And with the hair clippers knowing it’s okay that the clippers aren’t going to hurt him and not to be afraid of them. And I think he’s learning how to interact with me more in a structured way instead of just an open place, which doesn’t work well for a child with autism.

**Do you think the program had an effect on your relationship with your child? If yes, how?**

Parent A  Yes, he’s approaching me more and more open to me and more willing to try things that I model for him.

Parent B  Definitely. It’s a more positive relationship and it’s a much more vocal relationship. He’s talking more and I think the next step for us will be improving him getting my attention but were on that road. Like he’d be playing and he’ll say, “I want the mommy to talk on the phone” so that’s my
cue to say okay pick up the phone and I’ll have her dial daddy. And the next step would have [Child] coming over and saying mommy will you come play with me. But we’re getting there.

Parent C | Yes [Parent went on and answered the next question]
Parent D | Most definitely. We take time to play and its better than before now he really likes to come play with me because it wasn’t fun for him before and now its fun for him. It’s a long-term process.
Parent E | Yes, most definitely I think it’s brought us closer together. I think that he, when I do use aba therapy with him I think its easier for him to relate and easier for him to understand and I think our interactions are closer.

**Do you think the program had an effect on other relationships within your family? If yes, how?**

Parent A | He’s been more interactive with his brother and more affectionate to him as well.
Parent B | Uh my husband wasn’t able to participate as much as [Child] and I did, but we could share with him what we were doing and give him the cliff notes. So I’m able to prompt both of them in a situation so I yes I think that’s improved.
Parent C | It also helped my wife when she’s engaging with my son not to probe too much because he got use to cycle what’s his name, what color this is that and he’s going to therapy like 4 days a week here. Just give him a break. Take time to have fun because it’s also a learning experience for him but he doesn’t know, just fun things basically.
Parent D | [Answer above: talked about brother]
Parent E | I think with my husband he’s had the same experience and it’s strengthen our relationship.

**In your opinion, was the length of the parent-coaching program, 4-weeks, too short, just right, or too long?**

Parent A | Just right, I would love for it to be longer, you can never learn too much.
Parent B | I think it was just right.
Parent C | For me right now it’s just right because it’s the pilot program. If they would start another program, again like this I would participate and if they changed the dates, I would have a much better answer but since this is my first participation, I’m pretty happy with the way they had made out the course for 4 weeks.
Parent D | Just right.
Parent E | Just right there was a lot of information the girls had to cover but they did it in good format and I think it was very good and very targeted.

**In your opinion, was the number of hours per week (2.5 hours on Saturday and 1 hour in home during the week), too short, just right, or too long?**

Parent A | Just right.
Parent B | It was just right. In home, it was not an hour it was about a half hour, which I think is sufficient. I think the timing was good. In the first 3 sessions it was a lot of material and it was hard to get everything in on time but sometimes we started a bit late so I think the timing was right.
Parent C | For me just right.
Parent D | Just right.
Parent E | Just right. For task we were trying to accomplish

**Please share what you would change, if anything, in regards to the number of sessions, length of sessions, and overall length of parent-coaching program.**

Parent A | Nothing.
Parent B | I would not change it. I know we had some personal things that made it not be 4 consecutive Saturdays. I think generally for scheduling it’s easier to do 4 consecutive Saturdays. But the interruption was not terribly disruptive I just don’t know if I would plan it that way.
Parent C | Nothing. The handouts are pretty professional, I was so impressed. Even my office doesn’t have materials like that. The presentations are good. The discussions are open but we were able to openly discuss experiences which they encouraged that. If there was another parent that had contacted this, shared it with them, so for now I’m really happy with the program. The content is there. The way of delivery is pretty effective because they do graphs. In my line of work that’s how I deal with the data. If you present me with graphs and they had video. For now, I would just say they’re doing a great job and everything was very professional. Simple things like that matter. When I have meetings, I want things like that. I cannot find anything [to change]. The presentations were very professional, great, top line. That’s why asked you guys print this, no they had it professionally done at I think at kinkos or somewhere but it was professionally done so even taking that effort I really appreciate that. So, I want to keep my handouts pristine. Ya improvement probably if they could get more participants. They could get ya, I know they sent the word before the program started. I’m surprised only a few parents participated. So... but ya that’s all I just wish more parents could have came because the interaction is more you know you feel like you’re not the only one on this journey and then you could share and help, you could help a family.
Parent D | It’s good.
Parent E | I don’t think I would change the length unless additional goal was added.

**Did you feel like picking a goal for your child and working on it with the parent coaches was worthwhile?**

Parent A | Yes.
Parent B | Yes.
Parent C | Yes.
Parent D | Yes.
Parent E | Absolutely.

**As a parent, were the techniques you learned beneficial?**

Parent A | Yes.
Parent B | Yes.
Parent C | Yes, obviously.
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<tr>
<th>Parent</th>
<th>Response</th>
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<tbody>
<tr>
<td>Parent D</td>
<td>Yes.</td>
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<tr>
<td>Parent E</td>
<td>Very much so because my husband and I have more confidence that we can do the ABCs, you know the antecedent behavior and consequence more effectively and understand him better and understand how to model behavior for our child. I think so definitely.</td>
</tr>
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</table>

**Were the power point presentations helpful?**

<table>
<thead>
<tr>
<th>Parent A</th>
<th>Yes very.</th>
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<tbody>
<tr>
<td>Parent B</td>
<td>Yes. I like that we had a binder to take home with us for reminders.</td>
</tr>
<tr>
<td>Parent C</td>
<td>Yes, very professionally done, totally great.</td>
</tr>
<tr>
<td>Parent D</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent E</td>
<td>Ya it gave a really overview and a good reference point to go back to later on if we need a refresher or just trying to accomplish another goal we can use it as a reference point.</td>
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**Did you find the activities and videos valuable?**

<table>
<thead>
<tr>
<th>Parent A</th>
<th>Yes.</th>
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<tr>
<td>Parent B</td>
<td>Yes.</td>
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<tr>
<td>Parent C</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent D</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent E</td>
<td>Yes, it was good to see other children and other scenarios and also see a typical child vs. a child with autism. And how they act differently and relate. We saw one of the toddlers so yes insightful.</td>
</tr>
</tbody>
</table>

**Was it beneficial to be in a group setting? Why or why not?**

<table>
<thead>
<tr>
<th>Parent A</th>
<th>Yes because helpful to hear other experiences with something you might be working on and you haven’t had any luck and get suggestions from other parents that got to the goal you’re trying to get. So I think it’s really helpful.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent B</td>
<td>Yes, it was beneficial to be in a group setting. It especially good to hear what other families are dealing with b/c you can figure out if some of the success they’ve had you can apply to your own life.</td>
</tr>
<tr>
<td>Parent C</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent D</td>
<td>Yes most definitely because you get to hear from experience and so many other parents have experienced the same thing. Because some of the parents have the same experiences, we shared so many things like cutting the hair. It’s a big deal for most of the kids and we shared so much information and how we can work on it and so many other things that we get to hear and their ideas its really helpful.</td>
</tr>
<tr>
<td>Parent E</td>
<td>Yes I don’t have any other friends outside of [Clinic Name] that have children with autism that I’m aware of so it was very beneficial to get to hear the other families talk about their children, their experiences and you know a lot of experiences their having we have to. So, I think it build that commemorative that little support group there and other parent will make suggestions in particular for the haircut scenarios with out son. So, that was very very helpful. I think all of us have formed a closer relationship I would be surprised if some of us don’t follow up with each other and exchange emails</td>
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</table>

81
and phone numbers and keep up that collaboration going. The group setting was more efficient than if we had not had it in a group setting.

**Do feel the ABC parent coaches were professional and knowledgeable?**

<table>
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<th>Parent</th>
<th>Response</th>
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<tbody>
<tr>
<td>Parent A</td>
<td>Yes.</td>
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<tr>
<td>Parent B</td>
<td>Yes.</td>
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<tr>
<td>Parent C</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent D</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent E</td>
<td>Absolutely in fact, one of them Amber has worked with our child specifically and we have always been related. There’s not another place I would take my son. Hands down they’re great.</td>
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**Did the ABC parent coaches provide you effective feedback?**

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<th>Parent</th>
<th>Response</th>
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<tr>
<td>Parent A</td>
<td>Yes.</td>
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<tr>
<td>Parent B</td>
<td>Yes.</td>
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<tr>
<td>Parent C</td>
<td>Yes. They honestly did really good in giving feedback that’s why and they provided feedback with graphs and data and I told you before that’s how I would do the pre and post and you call baseline when you did the intervention. In my work we do the pre and post so I know. I saw how they did the baseline and that was a few weeks ago and I want to say that I’m not there but I’m nearly there from that probing I did before.</td>
</tr>
<tr>
<td>Parent D</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent E</td>
<td>Yes in particular when they were coming home it was very very helpful Brittany and Amber both if they would see me doing something, jumping a step ahead on where we were trying to go they would help me to understand why to jump back and how to jump back to help my child so absolutely.</td>
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**Did the ABC parent coaches communicate clearly throughout the training?**

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<th>Response</th>
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<tbody>
<tr>
<td>Parent A</td>
<td>Yes.</td>
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<tr>
<td>Parent B</td>
<td>Yes.</td>
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<tr>
<td>Parent C</td>
<td>Yes they do.</td>
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<tr>
<td>Parent D</td>
<td>Yes.</td>
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<tr>
<td>Parent E</td>
<td>Yes.</td>
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**Were the ABC parent coaches approachable?**

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<th>Response</th>
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<tr>
<td>Parent A</td>
<td>Yes.</td>
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<tr>
<td>Parent B</td>
<td>Yes.</td>
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<tr>
<td>Parent C</td>
<td>Yes they were really did great answering questions and I asked a lot, I feel like I’m being selfish right now, but I wanted to make sure that I was taking advantage of what the program is offering. But if I had any issues, and the other parents, yes they would answer questions.</td>
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<tr>
<td>Parent D</td>
<td>Yes.</td>
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<tr>
<td>Parent E</td>
<td>Absolutely they provided me their cell phones and emails and were just very warm and welcoming with any questions that we would have.</td>
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**What did you like best about the ABC parent-coaching program?**
Parent A | To me it was the videos, to help me see what I have to work on and what I’m doing. So I think the videos helped me a lot.

Parent B | I liked that we could have the flexibility to apply the techniques to each particular thing that we need help with and that it worked. It really did make a difference.

Parent C | It helped me have fun with my kid again. Because before my concept was when leaves here I’m going to be like let’s keep probing him and make sure what’s this what the color what’s the color and now I think he’s getting a lot of therapy here I should give him a break.

Parent D | The whole thing, taking the videos, getting the feedback, and learning about where we can make improvements towards your goal. That’s really helpful. You look at the videos and you can see the mistakes. I really liked it. When you’re working at home you have no feedback about what’s going right and what’s going wrong. Making us watch the videos and giving us the feedback on the videos I really liked that.

Parent E | I think that what I like is best what its taught my husband and I that you know that with learning some of these basic skills and concepts that we can apply those in our day to day everyday lives and we can help transition [Child Name] from what he experiences day to day at [Clinic Name] to our home environment which is a more natural environment and be able to apply ABA and the ABCs of that in a natural environment to just help him develop effectively to where he can migrate with typically developing children.

**What did you like least about the parent-coaching program?**

Parent A | Nothing, everything was good.

Parent B | It’s easy to be self conscious in the beginning of a group situation and with the video taping but I think you have to get over that in order to get the benefits so no there’s nothing else.

Parent C | Getting up early on Saturday and bringing two kids. But you have to get the good with the bad. If you want to benefit from the program and the quality time they give us because I’m sure if they did this on a week day surely they won’t get participation from other parents so its okay the hours are not that bad, 9:30, but still on Saturdays I want to sleep extra late but the benefits outweigh. So I’m going to take the good with the bad. I lose my Saturday mornings but I think it’s beneficial for me because I get to spend Saturday learning how to help my special needs child so win win.

Parent D | Nothing.

Parent E | That it’s going to be over soon. I can’t think of anything negative.

**Would you recommend the ABC parent-coaching program to other parents?**

Parent A | Yes.

Parent B | Yes. I think it would be nice to see something like that at [Clinic Name] on a regular basis. And I don’t know if this is the right place to say this or if at the end there is... [Interviewer asked mom next question]

Parent C | Of course, that’s why I said to you earlier I wish they were more parents that would have attended this because if they ask me I highly recommend it.
<table>
<thead>
<tr>
<th>Parent</th>
<th>Response</th>
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<tbody>
<tr>
<td>Parent D</td>
<td>Yes.</td>
</tr>
<tr>
<td>Parent E</td>
<td>I would absolutely.</td>
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**Is there anything else you would like to add?**

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<tr>
<th>Parent</th>
<th>Response</th>
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<tbody>
<tr>
<td>Parent A</td>
<td>I just want to thank you everyone that made this program available to us because I learned a lot and just little things that we can work on. It really has helped me get more close to him and I just want to thank everyone who made this possible.</td>
</tr>
<tr>
<td>Parent B</td>
<td>Okay this is what I would recommend with this um... should be offered again and I know there were families here from other locations. But the reason why this was successful is because our children could come and be with their coaches. That makes a big difference. For us it made a difference that it was at this location and not at another location. So I think for parent training things to be successful ideally they should be at the parents’ home center and the children should be able to come and spend time with their coaches. And I think that’s what made my participation possible.</td>
</tr>
<tr>
<td>Parent C</td>
<td>I would just like to say thank you to both ladies for doing such a splendid job and also I wanted to contact to Dr. Rosales, Shahla to tell her these ladies did very good and that’s why I was asking for her email address because I know they put in a lot of hard work all four weeks and I appreciate it that because it helped me improve my relationship with my kid, the special needs and the neurotypical. I just want to say thank you and they did an excellent job and I will email Dr. Rosales and tell her I’m thankful for the program and I wish it would happen more. I’ve been at [Clinic Name] since 2007 and I know they offer parent programs but I really like the consistence of this once, week by week. We go from baseline or pre and post. Very good.</td>
</tr>
<tr>
<td>Parent D</td>
<td>Thank you, good job, very helpful, the experience.</td>
</tr>
<tr>
<td>Parent E</td>
<td>This was just a very pleasant experience and we learned a lot and grown a lot and we appreciate the opportunity to participate.</td>
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REFERENCES


