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Sunny Starts

DANCE Instruction for Parents and Toddlers with ASD

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Typical toddlers and their parents engage in a graceful “social dance.” In a longitudinal study of 42 families, Hart and Risley (1995/1999) described the social and linguistic interactions of parents and their typically developing children. They observed infants growing into toddlerhood for an hour once per month over the course of two and a half years. Then they quantitatively and qualitatively offered insights into the complex and beautiful “social dance” that takes place between toddlers and parents. The researchers characterized the interactions as occurring in frequent, discontinuous episodes; with both parents and toddlers engaging in leading and following behaviors; both partners enticing or prolonging interactions; and, perhaps most importantly, parents and toddlers often appearing to stay together for no other reason than enjoyment of the social interaction itself.

Unfortunately the “social dance” that takes place between toddlers with autism and their parents is, at best, awkward, and, at worst, heartbreaking. Both dance partners face challenges. By definition, children with autism do not respond to the social world in the same way as children without a diagnosis of autism. They have difficulty communicating to partners, and they are not interested in the same activities and events as their interaction partners (American Psychiatric Association, 2000). The situation is exacerbated by the fact that parents of very newly diagnosed toddlers face a myriad of concerns and stressors associated with their child’s disorder that could affect overall interaction patterns. Furthermore, the child’s lack of social relatedness has been associated with

overall parenting stress. There is, however, indication that parent training can alleviate some of that stress and increase the quality of interactions for both partners (e.g., Brookman-Frazee, 2004).

Parent training has been offered as both a means to increase child skills and to directly address the quality of parent-child relationships (see Marcus, Kunce, & Scholper, 2005). For example, training programs have taught parents to increase their children's communication skills, to increase imitation and play skills, to increase parental encouragement of positive sibling interactions, and to increase parental responsiveness. Furthermore, a growing number of studies have focused specifically on parent-toddler interventions.

Sunny Starts is a parent-training program that was created to help families improve their "social dance." The program is part of the Department of Behavior Analysis at the University of North Texas, and offers services in the local community, at Easter Seals North Texas, a nonprofit agency serving people with disabilities. Sunny Starts is also a service-learning program (Hartman, 1999), designed to provide the local community benefit while, at the same time, teaching graduate students to effectively and compassionately implement interventions, training, and research.

The purpose of this chapter is to describe Sunny Starts as it relates to the development of social skills in very young children with autism. In this chapter we will explain our views of social behavior and our basic working assumptions when approaching interventions for toddlers and parents. We will then describe the sequence of the program, including assessment and data collection procedures, our teaching and training methods, and our approaches to generalization. Finally, we will describe some family experiences in our program. The families have given permission for us to do so; however, many details will be changed in order to protect their privacy.

Defining Social Behavior

In the broadest sense, we view social behavior as any interaction that occurs between two people. There are competent ways of interacting that lead to progressive, productive, and fulfilling relationships in life; in fact, social competence is considered "a central organizing theme" for all human development (Odom, McConnell, & McEvoy, 1992). There are also ways of interacting that lead to limited or arrested development. One of the primary reasons a child receives a diagnosis with autism has to do with the way he or she interacts (or doesn't interact) with people (American Psychiatric Association, 2000).

Limited social competence is deemed the most challenging aspect of autism, and, for this reason, social skills training for children is considered one

of the most robust, albeit difficult, areas of intervention research. Most of this social skills research is with preschool and school-aged children and involves chronological peers. The interventions have typically aimed to increase skills thought to contribute to social competence (e.g., sharing, conversations, cooperative play) and the measures of success have included increases in the overall initiations, responses, and interactions (McConnell, 2002).

In the case of Sunny Starts, we work with the toddler's main social partners, his or her parents. We view their interactions as a starting point for all later social interactions. We are interested in teaching behaviors that improve family interactions and show some promise for promoting later social development and relationships.

The social behaviors we target for intervention are relatively simple. The context and the meaning of the behaviors are derived from the effects that "social" responses have on others. The effect is, to some degree, more important than the behaviors themselves. This viewpoint is sometimes referred to as "contextualistic behavior analysis" (Haring, 1992). This approach is in keeping with B.F. Skinner's functional approach to verbal and social behavior and takes into account the motivational functions of behavior as well as contextual stimulus control (Skinner, 1953). Within such an account, "social skills" such as a toddler gazing with a smile at his father, who responds with tickles and a lively song, can be understood within a context:

The skill has to be understood in relation to the goals that a child has for his or her social behavior, the quality of support that the social behavior receives from others, and the power of the simple presence and responsiveness of others in the child's natural settings to increase the occurrence of the behavior. In other words, a more contextualistic analysis considers the goals and functions of the behavior from the child's perspective, as well as the social responses that the child receives in interactions with others, which reinforces social behavior (Haring, 1992, 309).

In the Sunny Starts program, we look at the child's goals and effects as well as the parent's goals and effects. The primary concern is with the back and forth rhythm, the dance, between the interaction partners: Can we facilitate an increased number of initiations and responses? How can we help the partners prolong those interactions? How can we improve motivation to enjoy each other's company? How can these interactions be infused throughout the toddler's waking hours?

This approach involves "social" goals for both interaction partners. We work with the family to increase the toddler's social responsiveness to con-

tingencies arranged by the parent. For parents, we teach a basic interaction approach that the research literature suggests will increase overall responsiveness between the parent and child. (This approach includes attending to contextual variables, arranging the environment, setting the occasion for and responding to the child's social attempts and approximations, and responding in a way that is social and fun.) To help parents remember the components of a basic teaching interaction, we chose the acronym DANCE. This acronym was also developed to highlight Hart and Risley's (1999) metaphor regarding the "social dance" between parents and toddlers and to hopefully help parents understand the responsive and coordinated nature of the teaching interactions with their toddlers. Each component of the acronym will be described in detail later.

Because the children in our project are so young and the social interactions between any parent and toddler are less complex than with older children, the topography, or *what* we teach the parents to increase quality social interactions, is a relatively simple response. This is sufficient as long as we can achieve a point where the parent and child maintain and prolong the interactions with one another without our support.

The parents learn to target at least two toddler behaviors that the literature suggests will increase overall social opportunities—1) social attending, and 2) play. These are child behaviors that are more likely to produce generative and pervasive changes over time (Rosales-Ruiz & Baer, 1997). The first, social attending, involves the toddler orienting (eye gaze, body movements) to the parent. Previous research has shown that parents have learned to increase social gaze in toddlers with autism and that this appears to produce larger gains such as joint attention and increased social interactions. This teaching target is also supported by more basic research. For example, toddler research data suggest that behaviors such as the *lack* of differential eye gaze towards parents may be related to arrested developmental trajectories of social behavior (Jones and Klin, 2008).

The second target we teach is play. Play is considered central to a child's development, and children with autism have difficulties related to play and diversity of interests (American Psychiatric Association, 2000). Play is especially important for children with autism; it allows increasingly complex and enjoyable contact with diverse activities and social opportunities. It is generally agreed that to be considered play, it must be an activity that the child enjoys and that is chosen, not instructed or forced. For that reason, we are interested in helping parents increase the number of events that are playful and social. We do this in several ways. We introduce the parent to the concept of preference assessments, and interest expansion (Alai-Rosales, Zeug & Baynham, 2008), and we model and brainstorm ideas for new ways to playfully

interact given each toddler's preferences. Furthermore, with this playful and social approach, parents learn to use consequences in ways that the research suggests produce favorable social outcomes for children and to choose activities that may increase affectionate responses. Frequently, the play responses are as simple as tickle games, airplane rides, puppets making funny noises, squirting water guns, playing chase, and dumping items with exaggerated facial expressions and sound effects.

Not surprisingly, the kinds of behaviors that parents of toddlers are often most concerned about are the toddler goals described above and that are supported in the literature. For this reason, our primary focus in the Sunny Starts program is teaching parents to increase the contexts for social attending and enjoyable social play interactions.

Working Assumptions

Sunny Starts is a behavioral intervention program, not a model. Although the basic goals have remained the same since the program's inception in 2003, the specific procedures have evolved in response to new research evidence and feedback from participants. We have three basic assumptions underlying our work.

Our first assumption is that our program will change as new data are available and as families tell us what they find most useful, effective, and life enhancing. There are several sources of research evidence we turn to when trying to improve our practice: interventions in autism (e.g., National Standards Project, 2009); infant-toddler research in autism (e.g., Green, Brennan, & Fein, 2002; Stahmer, & Ingersoll, 2004); parent support and training (e.g., Dunst & Kassow, 2004); child development (e.g., National Scientific Council on the Developing Child, 2004); and social behavior as it relates to parent-child relationships (e.g., Dunst, 2004) and adult learning (e.g., Trivette, Dunst, Hamby, & O'Herin, 2009). Finally, we refer to a growing body of research aimed specifically at parents and their toddlers with autism (Brookman-Frazee, 2004; Kasari, Gulsrud, Wong, Kwon, & Locke, 2010; Landa, Holman, O'Neill, & Stuart, 2010; Schertz and Odom, 2007; Vismara & Rogers, 2008; Vismara, Colombi, & Rogers, 2009).

When implementing practices from these sources, we work within the framework of applied behavior analysis; that is, we take a natural science approach to understanding and trying to improve family life. We assume that there are lawful patterns of behavior and that scientific method (behavioral descriptions, direct observations, and controlled introduction of teaching conditions) and social validation can help us identify and manage those pat-

terns to the benefit of children and families (Baer, Wolf, & Risley, 1968). To that end, we collect data on parent and child progress and we rely on that data to inform program changes. We also value the opinions and feedback from the families we serve. Table 1 provides an example of our current satisfaction and feedback survey. To summarize, we keep abreast of research developments and we ensure that our families make progress and that they value the process and the outcomes. If research, individual family data, or parent feedback suggests a better course of action, we change.

Our second assumption is that parents have a special role as full collaborators during their children's early years. Our goal is that all families should be treated with kindness, dignity, respect, and sensitivity to their particular family culture and values. Along these lines, we try to acknowledge that all parents bring expertise and strengths to the intervention efforts and that they have the right and the responsibility for making choices and having control at every point in the program. This approach is supported by research on parent intervention partnerships.

Furthermore, full family participation and consideration is in keeping with our notions of social behavior; anything we teach occurs within the context of the family's ecology. Our goal is to help support events that will increase the overall health of the family ecosystem. In our case, this translates to direct teaching of parent and child social responses as well as careful attention to setting factors that may affect the ecosystem (e.g., family supports and resources, time management and scheduling, home safety and environmental arrangements, well-being of siblings, grandparent attitudes and interactions, etc.). We work with families to achieve an "ecological fit" with what they are learning and teaching. This is in keeping with the view that each member of the family affects one another and that a parent training intervention should be integrated into daily family life for everyone's betterment (Lutzker & Campbell, 1994).

Finally, we assume Sunny Starts is the first of many intervention steps for the family over the course of their child's life. This program is intended to be a prelude and a complement to an Early and Intensive Behavioral Intervention (EIBI), not a replacement. While our data indicate that the program has produced positive quantifiable outcomes, a larger body of research indicates that children with ASDs will require longer, intensive, and sustained interventions to increase overall functioning over the course of their lifetimes (Johnson & Meyers, 2007; Matson & Smith, 2010) and that families will continue to require support as they navigate services over time (Mayville & Letso, 2010). Sunny Starts is just a beginning point.

Table 1. Parent Feedback Survey Example

Please rate your satisfaction:	no. satisfied	Please answer these questions as honestly as possible to help improve our program.
<p>Overall Satisfaction My child learned meaningful skills. I learned skills to help my child. <i>Sunny Starts</i> helped our family.</p>	<p>0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7</p>	<p>What brought you to <i>Sunny Starts</i>?</p> <p>What did you do during training sessions?</p>
<p>Satisfaction with Program Components Professional staff Clinical facilities Intake process Community networking resources Assessment procedures Goal setting process Parent training techniques Home support and assistance Exit report and transition</p>	<p>0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7 0 1 2 3 4 5 6 7</p>	<p>What did you learn?</p> <p>What did your child learn?</p> <p>What did you like best about training?</p> <p>What did you like least about training?</p> <p>What would you change?</p>
<p>Additional comments:</p>		<p>Is <i>Sunny Starts</i> a useful program and, if so, why?</p>

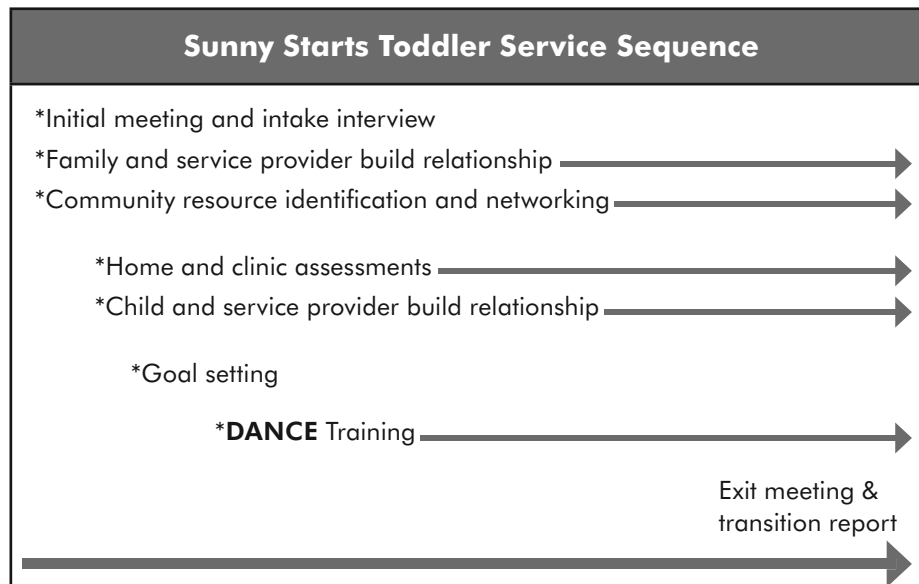
Service Sequence

Overview: Table 2 provides an overview of the Sunny Starts service sequence. Families attend a one-hour session either once or twice per week for a period of five to ten weeks. The schedule depends on the family’s logistical requirements (work, distance to drive, nap schedules, other appointments), although most sessions run in the mornings. A lead coach (the first author, a professor, or a senior graduate student) and a coach in training (a junior graduate student) conduct the sessions. The skills required of a lead coach include:

- Friendly parent interactions skills (hopeful, attentive, kind)
- Excellent communication skills (responsive, clear, accurate)
- Master autism interventions skills (BACB Autism Task List)
- Master toddler play skill repertoire (fun, interactive, responsive)
- Advanced training skills (narrating, instructing, modeling, feedback)
- Organization and technical skills (data, schedules, materials)

The staff engage in a series of activities with the family: An initial assessment and relationship-building phase, periodic assessments in the home and clinic, an intensive training period, and a transition and exit phase. Each of these activities will be described in detail.

Table 2. Timeline of Services



Intake Meeting and Interviews: During the initial meeting, we describe the program, review a service agreement that outlines expectations for staff and parents, and answer questions. Before any formal training begins, we want to do our best to provide information about Sunny Starts so that parents, along with other family members, can decide if this is the right time and program for their family. If the family chooses to continue with Sunny Starts, we start the interview process, which includes an assessment packet. Usually, parents prefer to fill the information out at home and then we ask clarification and follow-up questions in our next meeting. The questions address: 1) family goals and history; 2) social-communication skills and contexts of use; 3) play and imitation skills and contexts of engagement; 4) preferences, with a special emphasis on play activities and social events; and 5) child and family daily and weekly schedule.

The interview is five pages and the completion and follow-up process can take between thirty minutes and several hours, depending on how much the parent would like to talk. The interview and follow-up not only provides information that informs training, but also serves as the beginning of the relationship-building process between the Sunny Starts staff and the family.

Relationship Building: This starts at the beginning of the program and continues throughout the training process. It includes rapport with the parent (Ingersoll & Dvortcsak, 2006) and with the child (Carr et al., 1994). This is one of the most important parts of the program. With the parents, we spend time telling about ourselves and learning about them—as parents and as individuals. With the children, we spend time playing and sampling different toys and games. These activities help us get to know the family and help them get to know us: We try to learn ways to communicate effectively, learn what members of the family like and dislike, and learn what parts of family life are difficult and what parts are easy. All of this helps inform the training and reminds us that we share a common goal: to help the family.

It is also during relationship building activities that we discover additional support needs. For example, the family might need counseling, financial assistance, or additional therapeutic care. In these cases, we make referrals and help the family seek the additional supports needed.

Community Networking: Often Sunny Starts is one of the first points of intervention contact for the family. Typically the child has just received a diagnosis (or concerns have been formally addressed but no diagnostic label assigned) and family members are beginning to navigate institutional systems and figure out what they need to do to help their child. As we are building rapport and conducting assessments, we are also providing materials (a community resource book, websites, books, articles, DVDs), making contacts and introductions to other agencies, and answering many, many questions. This continues throughout the process. Parents have reported this to be an

Sunny Starts Data Sheet								
Session Date: _____ Scoring Date: _____ Observer: _____ Ob1 Ob2								
Child: _____ Parent: _____ Condition: _____								
Count Home helper sheets completed since last session? Y N								
#	Event	Parent		Child			Parent	
		Decide High Pref	Arrange	Attending	Verbal	Play Action	Now	
1			Enviro Model				Expand	Social Tangible
2			Enviro Model				Expand	Social Tangible
3			Enviro Model				Expand	Social Tangible
4			Enviro Model				Expand	Social Tangible
5			Enviro Model				Expand	Social Tangible
6			Enviro Model				Expand	Social Tangible
7			Enviro Model				Expand	Social Tangible
8			Enviro Model				Expand	Social Tangible
9			Enviro Model				Expand	Social Tangible
10			Enviro Model				Expand	Social Tangible
11			Enviro Model				Expand	Social Tangible
12			Enviro Model				Expand	Social Tangible
13			Enviro Model				Expand	Social Tangible
14			Enviro Model				Expand	Social Tangible
15			Enviro Model				Expand	Social Tangible
16			Enviro Model				Expand	Social Tangible
17			Enviro Model				Expand	Social Tangible
18			Enviro Model				Expand	Social Tangible
19			Enviro Model				Expand	Social Tangible
20			Enviro Model				Expand	Social Tangible
21			Enviro Model				Expand	Social Tangible
22			Enviro Model				Expand	Social Tangible
Total								
Total Teaching Episodes								
Enjoy rating for this session:								
Parent Interest: 0) Not interested 1) Somewhat interested 2) Mostly interested 3) Enthusiastically interested								
Child Interest: 0) Not interested 1) Somewhat interested 2) Mostly interested 3) Enthusiastically interested								
Parent Affect: 0) Unhappy 1) Nervous, Anxious 2) Calm 3) Happy, exuberant								
Child Affect: 0) Unhappy 1) Nervous, Anxious 2) Calm 3) Happy, exuberant								

Figure 1. Example of Session Data Sheet

important part of the program, and the networking has been what typically results in the child's next or concurrent intervention opportunity.

Home and Clinic Assessments and Data Collection: We assess the effects of our training efforts in two ways: through direct observations and through interviews and surveys. All direct measures are adapted from behavioral definitions found in the intervention literature, and from interview protocols and ratings used with families and further developed within thesis projects as part of our graduate training program.

To objectively evaluate session progress, we collect video samples and make direct observations of the behaviors we would like to increase. Five-minute samples of parent-child interactions are collected at home and in the clinic. Clinic samples are collected at the very beginning of every clinic session, allowing us to see what is going well and what we should work on during the training session. Home samples are taken to see whether the DANCE training effects have generalized to the home. In both cases, we count what happens during the five-minute sample. An example of our current data sheet is displayed in Figure 1 on the previous page.

At this point in time, we count the events (play activities and games), parent teaching episodes (use of high preference events, environmental arrangements, responsive models, language expansions, social and tangible consequences), and child skills (attending, verbal, play actions). These measures allow us to see whether the parent and child are making progress. Overall session ratings are made of child and parent interest and affect. This helps us monitor overall enjoyment and comfort with the training process. For research purposes, we are also going back and counting the way children are directing social attention between parents and activities. This is called "coordinated joint attention" and appears to be important to later social development (Brunisma & Keogel, 2004).

Goal Setting: After the third session, the coaches and the parents review the assessment information and look at graphed baseline data (parent DANCE components and child attending and play responses) from the first series of assessments (usually three from the clinic and one from home). At that point, we also examine basic skill areas thought to be important for toddlers with autism (Table 3, page 36) and talk about how social attending and social play fit within the "big picture." The overview we created was informed by autism intervention books (e.g., Lovaas, 2003; McEachin & Leaf, 1999) and by infant and toddler parenting books (e.g., Brazelton, 2006; Sears et al., 2003) and was designed to help parents see the overall goals and the possible component skills needed to reach the goal areas. Upon reviewing all the information, the parents and coaches determine the specifics of how attending and play will be addressed and whether additional communication skills should also be considered.

Table 3. Planning Guide for Toddler Skills

<p style="text-align: center;">Overarching Goal <i>To increase responsiveness, enjoyment and benefit from the social environment; to learn from others and develop loving family relationships and close friendships over the course of a lifetime.</i></p>			
Domain	Early Social	Early Interests and Activities	Early Communication
Master Goals	<i>enjoys communicating and sharing activities with others; develops attachments to widening circle of people</i>	<i>enjoys playing with a wide range of activities alone and with others</i>	<i>communicates own likes, dislikes, and interests; responds to communications of others</i>
Skills	<i>social attending, affectionate gestures, turn taking, motor, object imitation, and vocal imitation</i>	<i>sampling, selecting, and manipulating play and daily life objects within and across classes</i>	<i>functional (varied forms) for expressive and receptive communication</i>

DANCE Training: Training begins after initial assessments are completed, rapport is developed with both the child and the parent, and goals are specified. A mnemonic, DANCE, is used to help parents remember each of the teaching components and to emphasize the interactive and enjoyable purpose. DANCE stands for:

- **Decide,**
- **Arrange,**
- **Now,**
- **Count,** and
- **Enjoy.**

Each of these words describes a collection of procedures represented in a teaching interaction. These procedures are similar to and/or derived from several sources describing naturalistic teaching interaction procedures for preschoolers and toddlers with disabilities and from the naturalistic parent training research described earlier.

The Teaching DANCE involves five parts:

1. **Decide.** Parents are taught to decide upon favorable teaching times for themselves and their children (e.g., the parent has

few competing responsibilities, the child is rested, diapers are clean, the parent has chosen a skill/response to teach).

2. **Arrange.** Parents are taught to arrange the environment in order to maximize learning opportunities (e.g., evaluate their child's preferences, ensure the availability of a variety of high preference items, have methods to regulate and rotate access to the items, ensure that all materials are safe and working properly).
3. **Now!** Parents are taught to respond effectively to their child's approximations. This includes responding immediately and with enthusiastic affect when their child approximates to the desired goal responses; adjusting subsequent opportunities based on their child's response; and working in short, successful episodes that include fun play (from the child's point of view), taking turns within activities, and rotating activities.

Our DANCE . . .

Decide
 Is this a good moment for teaching?
 What are your teaching goals?
 Where will you teach?
 Are your materials ready?

Arrange
 Do you know what your child likes at this moment?
 How will you regulate access & rotate fun activities?
 How will you add and fade prompts?
 Are you leaving & happily waiting?

Now
 Is your response immediate, generous, playful,
 and social?
 Are you expanding?
 Is what you are doing effective?

Count
 Are goals monitored to see progress?

Enjoy
 Is everyone having fun?
 Are you alternating slow and fast dancing?
 Keeping it short and sweet?



Figure 2. DANCE Management Reminder

4. **Count.** Parents learn to count occurrences of goal responses at home.
5. **Enjoy.** Parents are encouraged to adjust their teaching in ways that make both the child and the parent happy and comfortable during teaching interactions.

In the first training session, the coach describes the teaching procedures to the parent, models for the parent, and practices with the parent. The coach and parents then discuss changes and retry the procedures. Parents are given a short manual describing the procedures and a refrigerator magnet summarizing the procedures. The magnet is personalized and has a picture of the child and parent(s) embedded along with the DANCE components. An example is shown in Figure 2 on the previous page.

At the end of each training session, the parent and coach review the session and determine family goals for the week. It is important for the coach and parent to understand how the “DANCE” best fits into the family’s natural ecology, so several variables are considered, including the family’s current routines, activities, and schedule. Taken together, the parent and coach determine the date, time, and conditions under which the parent will practice and implement the “DANCE.” This information is written on the “Home Helper,” which is displayed in Figure 3.


It usually takes two or three sessions to work out the right amount and type of activity that will be done at home—all team members over- or underestimate what can be done and under what conditions. Furthermore, sometimes scheduling time to have teaching interactions is challenging and we will spend additional efforts in helping the family increase relaxed interaction time and/or gain more social support at home. In combination with the home assessments, this is our effort to promote a context in which the social skills and interactions will generalize and sustain.

Family Outcomes


We would like to end our description of Sunny Starts by sharing some of our families’ stories and data. Figure 4 presents an overview of progress for the first eight families that went through our program. The data are collapsed and averaged for ease of presentation. Generally, during baseline assessments, the parents had a very limited number of teaching interactions (most parents had none and a few had one every five minutes). Before training, the children were not attending to their parents, not communicating, and not playing in very complex or safe ways. There was also very little coordinated attention. (Most children exhibited no attention and two children had very low rates.)

Sunny Starts Home Helper

Date: _____ Parent: _____
Child: _____

Progress 

Training Session Goal: _____



DANCE Practice Reminders:

- D**ecide

- A**rrange

- N**ow!

- C**ount

- E**njoy!

Home Planning:
Practice time(s): _____ Place(s): _____
Count: _____

Activity Highlight—*What were your most enjoyable play activities?*

Next Tele Training Session: _____ Next Clinic Training Session: _____
Be sure to write questions on the back!

Figure 3. Ecological Integration

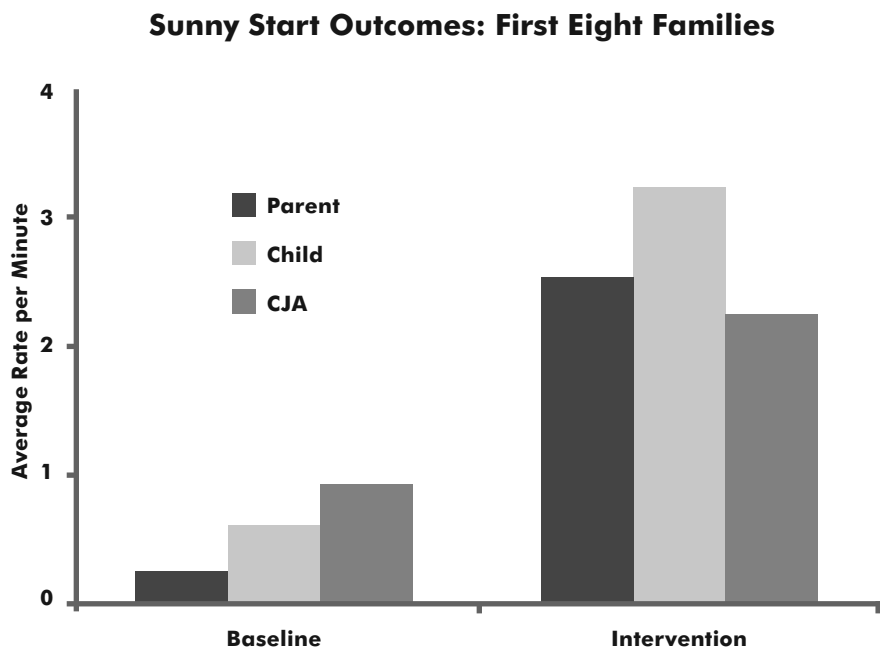


Figure 4. Parent Teacher Episodes, Child Responding, and Coordinated Joint Attention Across Assessment Conditions

Following DANCE training, on average, parents were providing 6 teaching opportunities per minute and child goal responses were in tandem with the parents'. Furthermore, the children were spending much of the time in coordinated attention with the parents, an average of ten episodes per minute. In effect, what we see is that the parents and toddlers increase the number of responsive events to one another. This is social progress, and, in each case, parents have expressed their happiness at the changes and improvements. Here are a few of their stories:

The Mancini Family

Danny, a contented toddler with big dark brown eyes, arrived with his own entourage! His mother, sisters, cousins, and grandparents all came to the first session. Each and every family member was smiling and eager to learn. Olivia Mancini, his mother, received most of the direct training. But his father and other family members also participated and contributed to the effort.

At the time he began in Sunny Starts, Danny had already been attending a private early intervention program. In this program, Danny had learned to point to get access to items that he wanted (for example, his pacifier or

chips) and Olivia had learned how to require him to point before she gave him something. She was very good at this and very proud that he had learned to gesture with meaning. His pointing, however, appeared to be very “unsocial.” That is, he pointed to get access to an item and then went away to his own isolated activity. Not only did he not make eye contact, but he actively appeared to avoid looking at anyone. So, following a period of rapport building, we started to work with Olivia on transferring what she had learned to do with the pointing to Danny’s social attending and to develop social games that he would like and that would maintain his attention.

Olivia learned to apply the DANCE components very quickly and only two areas required more extensive brainstorming—feedback and revision—the timing of event delivery and developing activities that were social and preferred. We worked on the timing (immediate is better so that the child understands that eye contact produces fun) by taking turns practicing and helping each other immediately catch the social gaze (or an approximation to it). The first thing we discovered was that (like many of the toddlers) Danny loved “tickle monster” games. This was easy to incorporate into a requirement to look and to do immediately. We would creep our fingers up his legs with an expectant look, saying, “Here comes the tickle monster. . .” and when Danny looked, we would say “Arghhh!!!!” and tickle him. He loved this activity and would pull our arms up, raise his eyebrows, and look expectantly. This activity we could further develop using songs and other phrases.

Along the same lines, to expand play activities, we experimented with the toys at Danny’s home and in our clinic. We tried both conventional and nonconventional uses. For example, we used the plastic balls to one game to make another game with a bucket. We would take turns throwing balls into the buckets and then dump them on Danny’s head. This produced delightful giggles and lots of social eye gaze. For each ball that was thrown, and for the big finale (the bucket on his head), he was required to look. The wonderful thing was that Danny kept laughing and looking at his mom and all of us even after the balls were delivered and the bucket was dumped!

Several months after Sunny Starts had ended, his family sent us a video of Olivia successfully teaching Danny to say “Mama.” At the end of the video clip they are both smiling at the camera.

The Ameen Family

Our nickname for Shirin was “Angel.” She had long golden curls, was very quiet, loved to cuddle and be close to adults, and always had to have one hand touching her mother. She did not make eye contact, talk, or play in any conventional sense. She had several objects that she liked to carry around

and would become upset if they were removed. She also was deeply interested in price tag stickers.

Shirin's family had recently immigrated, both parents were highly educated, and she had several older brothers. At the time of the intake interview, they reported being isolated from friends and family and expressed shock and sadness about the diagnosis of autism. As the sessions progressed, it became clear that the family was in crisis. We continued rapport building, community networking, and helping the Ameens to access Early and Intensive Behavioral Intervention and sibling support programs. We attempted to start DANCE training, but the family was very concerned with the other matters and asked to stop participation.

Several months later, the Ameen family reported that conditions had improved. One of the grandmothers had moved in, the siblings were receiving training and support, and Shirin was enrolled in an intervention program for 20 hours per week. The intervention program was teaching Shirin new skills and also allowed some respite for Zainab, her mother. Upon the family's request, we reinstated DANCE training. The initial assessments still showed no social attending and very little play. Once training began, Zainab quickly learned the DANCE techniques. Shirin continued to sit in her mother's lap at times but also began to sit across from her to play the games and activities we introduced. Her eye contact increased dramatically and we were able to expand her interest in price tag stickers to play scenes and to book stickers that we could do together. We also introduced play food items that were similar to the objects she carried around. Zainab would "eat" the play food (with very silly facial expressions) that Shirin handed her. This produced beautiful social attending and deep giggles from mother and daughter!

The Zang Family

Our first comment after meeting Roger Zang and his 18-month-old twins was "Wow!" The twins were adorable, freckled toddlers with abundant energy. Within minutes after they entered the clinic, they had explored and dumped every accessible item. Like Shirin, they did not talk or babble, had very limited conventional play activity, and made no eye contact. In this case, the twins' father, Roger, was the primary person to be trained. Both parents worked, but Roger's schedule allowed more flexibility to attend the Sunny Starts sessions. He would tape each session and then he and his wife, Emily, would watch the DANCE training session and practice on their own. Each week, they would come in with a list of ideas and questions written on the back of the "Home Helper" sheets. They were very active collaborators throughout the entire program.

The Zangs had two sets of twins with autism spectrum disorders. The older twins were described by the parents as having Asperger syndrome. The younger twins had a diagnosis of PDD-NOS. Both Emily and Roger were quite good at teaching and interacting with the older boys. They found, however, that it was more of a challenge to identify interests and “focus” the younger boys. Our clinic sessions were devoted to finding ways to regulate access to high preference events (containers they couldn’t open worked well) and to developing social games that involved a lot of roughhousing and movement (for example, pillow tosses, jumping on trampolines together). It was also very important to help create an evening routine schedule that allowed the parents to implement the DANCE procedures with each of their younger sons and still interact with the older boys. Eventually, the older siblings began to help the parents with the teaching interactions in the evenings. Everyone was dancing!

Conclusion

To watch us dance is to hear our hearts speak.

~Hopi Indian Saying

Sunny Starts is a short-term parent training program designed to help parents teach and respond to the social and play behavior of their children. It is modeled after several naturalistic programs for children with autism. Each family has been unique in terms of implementing the Sunny Starts DANCE procedures. Some families faced difficulties with specific procedures, some with larger life circumstances, and some with logistical arrangements. In all cases, the families have reported satisfaction with services and have observed meaningful changes. Sunny Starts is designed to lift the hearts of families and to be a starting point for increasing skilled social dancing between parents and their toddlers with ASD.

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