

Chapter 6

Building Self-Initiation

So far we have addressed only the very basic foundation of successful therapy and interactions with children with ASD – developing a sense of security and comfort in any given environment. We will continue to focus on increasing environmental acceptance all through the process of therapy with a child. What is the next key foundational skill? After a child has a sense of security in his/her environment we need to expand the focus of therapy. The building block of increased environmental security will continue as a primary focus throughout therapy and hopefully the child's life. As this base of security and relating is being established, we must add strategies to build self-initiation, purposeful nonverbal signaling, and an expanded ability to emotionally engage and relate to other people in the environment.

Building initiation and self-efficacy needs to be an early focus of treatment. Self initiation is seen by many within the field of autism treatment as a pivotal skill. The development of self initiation can have wide ranging effects on many behaviors and the acquisition of self initiation skills is a favorable prognostic indicator for developing more advanced skills (Koegel, Carter, and Koegel, 2003). Self-initiation places the focus on the child's ability to control the environment. How well a child does this is related to how comfortable and competent they are in navigating through a complex social world. Children with Autism often lack the necessary skills to do this. Every individual, including individuals with Autism, desire feelings of competence. When something is too confusing or too overwhelming a child will often give up and become frustrated. The level of challenge a child is presented with will have a profound effect on either building

or undermining initiation skills. For example, imagine the most difficult class you had in high-school or college. For one of us (CVD) chemistry was a subject that I did not feel confident with. Can you guess how many times I tried to initiate a classroom discussion about topics I felt incompetent with? If you guessed very few you would be correct. To take this a step further, even walking into chemistry class created a sense of anxiety. The teacher would routinely ask questions about different chemistry topics and call on students randomly. When this happened I tried to avoid eye contact because I did not feel confident that I could successfully answer the questions. Compare that response to areas where I did feel competent, for example, psychology classes. There I would love to initiate discussions and love to be called on. In fact, I would purposefully make eye contact with the professor in an effort to get him to call on me. A strategy that was reinforced occasionally by the professor.

Children with Autism are immersed in environments that make little to no sense to them. Using the above example, they are in a never-ending chemistry class. Despite their level of confusion the child with ASD is largely left to fend for themselves. Children with autism often meet with failure after failure when trying to positively impacting the world around them. Interventions need to address the issue of competence in the world by creating positive, predictable environments that allow the child to develop and expand their ability to successfully impact the environment around them.

Children have biological, psychological and social desires. Internal needs, drives, desires, and emotions lead the child to behave in the world. A child's initiation is first seen in facial expressions and eye contact between the child and his/her caregiver (Ling & Ling, 1974). Facial expressions and eye contact lead to a diffuse cry when hungry,

cold, warm, or uncomfortable, etcetera. This initiative is usually generic at first, but it works wonderfully as parents become savants at reading the cries of their child.

What we want to build in the child is their ability to flexibly use their motor and verbal abilities to fulfill their *desires (drives, needs, emotions)*. Learning is much more successful and long lasting when it is initiated by the child and personally meaningful to the child. For example, if a child is hungry and crawls across the room to a bowl of cereal, takes a handful and begins to eat, resulting in not being hungry anymore, the child has learned something that is very meaningful. He is likely to remember the steps he took to satisfy his hunger. He has increased his motor and motor planning abilities, problem solving abilities, fine motor abilities, visual-motor and visual-spatial abilities, and the experience was meaningful to him because all of the steps satisfied his hunger. Learning all of these things would be a much more complicated process if the positive outcomes were not directly tied to what is being learned. The self-initiation made the whole experience memorable, productive, and adaptive. Behaviors that work to satisfy needs are remembered and used regularly. Self-efficacy and an internal locus of control result.

Using one behavior to satisfy all desires, such as a newborn baby crying, has many drawbacks. This solution relies on someone else being in the environment that is willing and able to be responsive. The caretaker not only needs to be present and willing to respond, but they also need to be able to figure out the child's desires. As a child's motor, motor planning, vocal and sensory-perceptual systems mature, the child uses their new abilities to differentiate cries. New cries and movements are developed, and the

cries and movements become different for different needs. It is wonderfully productive to have someone give you a bottle when you are hungry instead of changing your diaper.

A child who has low muscle tone which causes difficulty moving, problems vocalizing leading to difficulty making different sounds, or problems with sensory processing leading to a decreased ability to sense bodily sensations can result in a disruption of the process of being able to convey needs and get needs satisfied. For example, a child who feels vague discomfort and does not differentiate whether it is related to hunger or a wet diaper cannot sense what the problem is himself; therefore, he will not be able to convey the problem to others in a differentiated fashion. Scenarios like this will lead to escalating frustration, and confusion, resulting in a lack of purposeful initiation, an external locus of control, and loss of feelings of self-efficacy.

Suppose the child can differentially distinguish between hunger and a wet diaper but doesn't have the motor or vocal abilities to coherently create a differentiated cue to the outside world. This child will also become frustrated and decrease self-initiated behaviors. Why? The child will shut down because self-initiation is not productive. What you see is a child who cannot connect his desires to behaviors or vocalizations. Diffuse crying is the only solution. Out of necessity, the focus very early in treatment has to be on reconnecting and expanding the child's ability to satisfy his/her *needs* in positive and adaptive ways.

Most children have the ability to expand and differentiate their ability to self-initiate. Their abilities may be minimal at first, and they may need the focused attention of a thoughtful and perceptive caregiver to help expand their ability to connect *desire* to outcome and build self-initiation. Well intentioned caregivers, in trying to expand a

child's ability to speak, will often expect too much which undermines the child's minimal ability to accomplish goals via self-initiation. For example, a child who is first learning to speak may request a ball by saying "ba." For an early learner you would not expect perfect articulation, the use of phrase speech to request the ball, or even to say please or thank you. For an early speaker, in creating self efficacy and competence in initiating, the correct thing to do would be to reward the child's request by giving him the ball when he says, "ba." (Once the child has this skill well established, more complicated skills can be systematically added later.)

The solution is to focus on building self-initiation skills. This is a difficult issue to approach. Developing a plan usually involves designing an educational or behavioral plan to address the functional problem. In this case, the problem is that the child is not connecting desires and behavior and is not self-initiating solutions. As we design a plan to remediate this problem, we have to take into account the child's perspective. The child will self-initiate on his/her own time schedule. We can set up the environment and wait for the behavior. We cannot make the behavior happen. If the child could self-initiate and connect their *desires* to behaviors that lead to attainment of the *desire*, the child would. Since he/she is having difficulty with this area, we need to be able to recognize adaptive behavior (behavior that will lead the child closer to attaining their goal) and move the child closer to their goal when the behavior occurs.

The best motivators for a child are natural things in the environment that the child desires. You can generally determine what a child desires by observing the things he seeks out and observing which things he cares about when items are removed from the environment. As the child moves around, you see purposeful, self-initiated behavior.

The next step after crying is usually to attain the desired item physically. Motor problems and motor planning problems, as well as visual-spatial problems, can significantly interfere. When a child cannot physically attain the desired object, the motor tasks involved in attaining the desired object must be broken down, and the object must be made easier to obtain. Objects that can be freely available to the child should be in places where the child can attain them independently.

This is one step above a child diffusely crying to obtain a non-specified object. Making items obtainable is a good first step for a child that can move, but cannot point or communicate. The object should be in a place that can be reached by the child easily. The accommodation should be gradually decreased until the object is in a normal location. Attaining the object becomes more and more difficult as the child's problem solving and motor abilities improve. Let me repeat: "The accommodation should be gradually decreased until the object is in a normal location." This is a step that is often missed. Most children with autism are already at this level. We often find parents who are amazed at the level of independence of their child. For example, a child who likes potato chips and knows they are easily available, will quickly figure out a way to get to them independently, bypassing any interaction with others in their efforts to get them.

However, potato chips are not always easily accessible, nor should they be. When a child is aware that the desired potato chips are available you create a learning environment where adaptive initiation skills may be developed. The next step is to require a purposeful signal to an adult for help. The first two purposeful signals have already been mentioned; crying and physically attaining the object. We want to build a higher level adaptive skill in the place of crying or physically attaining an object. The

next step would be to move the desired objects out of reach so that the child has to go through an adult to get them. We often suggest that parents have many shelves in their house so toys and many preferred items are visible but unattainable without the adult. You may see a variety of behaviors at this point, all of which could be rewarded by providing help to the child. Reaching for the object would be a more advanced skill, moving the child in the direction of pointing. Glancing at the object and then at a parents eyes would also be more advanced. Pulling the parent by the hand or finger would be another improvement over the child physically attaining the item independently. All of these responses are at a higher adaptive level because they are discriminative. They are not, global strategies that are nonspecific. As frustration builds because the desired items are not within reach, the child has to relate socially to someone in their environment to attain the item. It is important here for the caregiver to be aware of the developmental progression of adaptive behaviors and ready to respond with help when a higher adaptive response occurs.

At each step of adaptive responding the child should become very successful at using their newfound ability. Again, this can be a very difficult time for parents. They see the wonderful success the child is making and want the advances to continue. We have often observed a parent recognizing progress and then, for instance, pick the child up to help them attain the item only to stop short to try to get more from the child. The parent is waiting for a word or another gesture. The child has already communicated his/her desire, and the parent has responded. The child's communication needs to be successful at this point in order to establish the self-efficacy and competence necessary for future growth. When dealing with this new adaptive level, we will first want to make

the child very successful with the new behavior. That might mean weeks of accepting a reach or a glance as good enough. Therapeutic progress involves patience and taking progressions slowly as they come. If a child cannot make the next leap into a higher adaptive behavior, we break the next level of behavior into smaller behaviors and reward the first approximation. For example, if the child is not capable of reaching for the object, glancing at the parent, or pulling the parent, we may reward a step toward the parent after the child glances at the desired item. The point here is to be able to recognize the highest level of function the child shows and make their highest adaptive attempt successful.

In general, we are looking for diffuse non-specific crying to grow into differentiated crying, which leads to differentiated vocal sounds to specify needs. Differentiated vocal sounds become increasingly complex until they are words, sentences and explanations. Physically doing things for oneself grows into gestures to attain unattainable desired items, pushing and pulling behaviors, eye contact, facial expressions and subtle non-verbal behaviors. Our goal is to recognize where a child is and to slowly progress them along this spectrum, keeping the child successful 90-95% of the time.

As the child begins to use people in his or her environment to accomplish goals, the child has to engage with other people. Engagement and purposeful signaling become our focus as the child moves toward this adaptive level. It is important to read non-verbal behavior and exaggerate our own non-verbal behavior and affect to make these more salient to the child. Reading non-verbal behavior and affect is a skill that is instrumental in all human contacts. Within most human interaction, there are multiple levels of

communication going on simultaneously. Behavioral signaling, emotional tone of voice and verbal language all are occurring at the same time.

When relating to a preverbal child, we need to work on the signaling systems at the level that the child is capable of displaying and reading. *Behaviors and emotional tone of vocalizations are where we need to focus our attention when a child is preverbal.* Recognize and read the child's behaviors and assist the child to accomplish their goals at this level. Listen to the emotional tone of their vocalizations and respond to the emotional tones by helping the child attain their goals and mirroring vocally the emotional tone to convey empathy. This attentive stance creates an engagement in the emotional world with others and helps the child realize that relating to others is functional and productive. The child learns that it is easier to obtain desired objects through a relationship with others.

Here the child should be taught to respond to gestures. We usually like to teach gestures with no accompanying vocalizations. A child will understand and respond better to the gestures when the usual vocalizations that accompany them have been removed. This is much like the concept of keeping the things we say to a child very short and succinct. When we eliminate the complexity the child has more of a chance to understand our behavior.

As a child initiates interactions with a parent or caregiver the child is looking at the caregiver. The caregiver's facial expression, body language, tone and volume of voice will all be experienced by the child. Through classical learning the child will be making associations which result in physiological (emotional) changes in the child. Facial gestures, body movements, tone of voice and a variety of other behaviors emitted

by the caregiver will be associated with environmental events that are experienced by the child as positive and negative. The emotional tone evoked by excitatory and inhibitory learning provides the emotional intelligence to respond to situations before a child is verbal. A child learns to predict from an unhappy facial expression on mom's face that a current desire may not be fulfilled. Conversely the child learns that a happy expression often leads to the parent or caregivers helping the child attain a desired goal.

As a child builds self-initiation skills and learns to differentially signal and respond to signals from their caregiver the child is constantly encoding associations between environmental events and outcomes. Through classical learning and learning by consequences, emotions and physiological reactions are shaped, added and subtracted. When similar environmental events occur in the future the child will have a specific mixed emotional response. The emotional response is the culmination of associations elicited by environmental predictors and outcomes. The environmental events lead to an emotion. Success or failure at controlling the environment will further shape the physiological (emotional) response in the future and lead to alterations or consolidation of the response. In typical behavioral terms the physiological (emotional) correlates are unnecessary to describe what is occurring. For that reason discussions of what is happening in regard to emotions is often left out of behavioral literature.

Through preverbal, give and take, nonverbal, gestural interactions between a parent and child a child develops the beginnings of emotional (non-verbal) intelligence. Recognizing the role of the environment (the caregiver as part of the environment) and the principles of classical learning as well as learning by consequences will allow a parent, caregiver or therapist to impact the environment in meaningful ways to alter the

child's responses. Ideally the child will develop a skillful ability to accurately read the environment and the non-verbal behavior of others and respond in a productive way to the environment. This preverbal (emotional) intelligence will guide and influence verbal intelligence throughout a child's life. A child does not start to think and learn in a verbal sense until much later in development. Even when a child is encoding their experiences in language and guiding their behavior by rules they simultaneously encode information non-verbally and continue to develop their non-verbal (emotional) intelligence. When faced with a situation an adult has years of experience shaped by classical learning and learning by consequence resulting in physiological reactions to the events. These physiological reactions along with patterns of responding make up what most people call emotions. Most people will say that they did something because of an emotion. They leave out the environmental events that shaped and created the emotions. As an abbreviation "emotions" lead people to act in the world. Verbal humans have emotions shaped by experience and their verbal (rule based) knowledge (which is also shaped by classical and operant conditioning) to rely on when attempting to predict and control a situation. Emotional knowledge is direct experiential knowledge. Verbal knowledge can be direct yet symbolic or indirect and rule based. Rule based knowledge which can be acquired once a child is verbal can at times interfere with experiential knowledge.