

Adam Healy

May 19, 2013

Increasing Social Motivation in the Treatment of Autism

Imagine that you were a child with autism. You have trouble controlling your frustration. You get so frustrated that you become violent with yourself and others. You don't understand a lot of the world around you. You have trouble sitting still. You are extremely stressed out. All you have to release your tension are the few things that you enjoy. You happen to really enjoy Sesame Street and flapping your hands. Then a new behavior analyst walks in the door who you don't know. You are told that you can never flap your hands because it is not appropriate. You can't make silly jokes because it is not appropriate. You can't watch Sesame Street even though it is the only show you like, because it is not age appropriate. You are told that you have to sit at a table and be still, even though this is incredibly difficult for you. You are made to repeat sentences over and over until memorized. Given your history of violence when frustrated, how would you respond?

Working in the field of Applied Behavioral Analysis (ABA) which is a data-based psychological treatment for problem behaviors in autism, I have often seen this approach when dealing with children with autism, rather than a more sympathetic and socially reinforcing approach, which, as I show in this paper, can produce better results.

First, let me give you some background on ABA. The field of ABA often discusses types of behaviors that should be changed. One type of behavior to be changed is socially inappropriate behavior. This can mean many things when it comes to a child with autism. They may laugh at strange things, watch shows that are meant for a much younger audience, flap their hands, and enjoy making or hearing loud noises. It is often promoted to staff and analysts in the ABA field to discourage all socially inappropriate behavior, in order to help treat the symptoms. As you read on you will see that increasing social motivation first can be built upon without the frustrating results.

Autism is a neurological disorder that affects many people today. This can range from mild autism, or Asperger's, to severe autism. Children with severe autism have difficulty socially and with communicating. They often engage in stereotypy, which is behavior such as hand flapping or making noises for self-fulfillment. They often engage in violent behavior and self-injurious behavior. There are many treatments for autism but there is no cure. In a school that specializes in the treatment of autism

there are always different methods at work. There are occupational therapists, speech pathologists, special education teachers, and Applied Behavior Analysis behavior specialists. ABA is one of the strongest supported fields for the treatment of autism. It is used to treat problem behaviors, deficits that exist in people with autism, and to educate students with autism in a way that is clear and easily tracked with data.

Here is a case based on my personal experience. Bob (not his real name) is a twelve year old boy diagnosed with autism. Several years ago I began treating him as a behavior therapist in the field of ABA. I was tasked with helping Bob to learn how to shower independently and help him improve his problem behaviors. Bob had been working on showering for years with no real success. His problem behavior was mainly being too silly. Randomly he would try to say funny things, laugh, and flop on the floor. He would act very goofy and would not respond to requests to get up. This would get in the way because he would do this while working or in public. Bob attends the top ABA autism school in the country, NECC. The people at NECC dealt with this using the fundamentals of ABA. They stated that the function of his behavior was attention. Bob was seeking out the attention and physical response of others by engaging in this behavior. The intervention was to remove the consequence of attention. When working with Bob, I was told to never be goofy with Bob or joke with him, as this might escalate the behavior.

I tried this and it never worked. So I tried the opposite. In my mind, I started to think, "That's silly. He's a boy. He just wants to play." So going against the ABA experts, I started to play with him at the start of each session. We would tell silly jokes and laugh and do all the things that NECC didn't want him to do. After a week, something strange started to happen. Bob started to change. He stopped having his silly behaviors completely. He seemed to enjoy his time with me so much that he seemed motivated to keep me happy. He stopped being lazy and prompt dependent. He learned how to shower independently in the following months. He would do all the things asked of him and do them well. When I first met him he was overweight and despised exercise. After six months we were jogging together 3 miles per day. So why did going against the conventional wisdom work so well. First I didn't look at him as a subject. I looked at his needs as a person and fulfilled one. As a child, he needed to play. I gave him the attention he was seeking in an appropriate way. In that process he formed a bond with me. He knew that his time spent with me was fun, cared about what I thought of him, and wanted to do well for me. He developed motivation and it helped him greatly with his behaviors and with his education.

Having experienced this case for social motivation, I searched the field of psychology for support in the literature. I found that it is believed that diminished social interest is one of the earliest and most persistent symptoms of autism. Shultz (2006) is a proponent of the social motivation model:

'social motivation model,' which posits that social deficits in autism are a consequence of reduced social motivation that starts early in life and has profound developmental consequences, including fewer friendships and social isolation.

Much of the behavioral and educational problems with autism are due to this lack of caring about social consequences to their actions. We can work against this by trying to be socially motivating to the students.

The following is another instance from my experience that supports social motivation Tim (not his real name) is a 10 year old boy who has severe behavior issues. His behaviors include violence, self-injury, throwing of fecal matter, spitting, and destroying property. He was expelled from his public school and ended up in my school. When I first met Tim he would average two hours of outbursts per day. Tim would have his outbursts with no apparent reason. Tim appeared to be having a great time when he exhibited problem behavior and eventually I realized why. He enjoyed the struggle. When he did something, people would try to stop him, which ended in a struggle. He seemed to be seeking the physical interaction and play with people, but didn't have the social skills to do it in the right way. What I started doing was give him that attention that he needed. We all need attention. The problem was that his autism and communication difficulties kept him from getting it in a way that is socially appropriate. When he was doing well, I would tickle him or come up with chasing games like tag. He started to learn appropriate social ways to interact. Most importantly, he was so motivated by my attention that he cared about the social ramifications of his negative behavior. He stopped having tantrums and started working well in school. Now his problem behaviors are at a minimum.

"The social world summons our attention like no other domain: social signals are prioritized by attention, interactions are intrinsically rewarding, and social maintaining permeates interpersonal behaviors. Social motivation is subserved by dedicated biological mechanisms and can be seen as an evolutionary adaptation to humans' highly collaborative environment: by enhancing attention to social information, by rewarding social interactions, and by promoting the desire to effectively maintain social bonds, social motivation smoothes relationships, promotes coordination and ultimately fosters collaboration. In ASD, by contrast, there appears to be an overall decrease in the attentional weight assigned to social information. Diminished social orienting, social reward and social maintaining are all found in autism and can account for a range of behaviors, including cascading effects on the development

of mature social cognitive skills. Autism can thus be seen as an extreme case of early-onset diminished social motivation and provides a powerful model for understanding humans' intrinsic drive to seek acceptance and avoid rejection." (Chevallier, 2012)

This way of looking at autism suggests that increasing social motivation would be extremely important in treating autism. If you didn't care about the social consequences of your actions, you would be liable to do many maladaptive things.

Dr. Robert Koegel and Dr. Lynn Koegel of University of California Santa Barbara promote a type of teaching to autism called Pivotal Response Training. The Keogels state that:

"The research proves out that there are four key "pivotal" behaviors. Pivotal behaviors are those that, when mastered, evoke positive changes that are widespread across a broad spectrum of other important behaviors associated with language and social interaction." (2006)

Pivotal behaviors are behaviors that are central to wide areas of a child's functioning. When promoted, they are believed to produce improvement in many non-target behaviors. There have been four identified pivotal behaviors, which include responsivity to multiple cues, motivation, self-management, and child self-initiation. When any of these behaviors are enhanced, improvement in autonomy, self-learning, and generalization of new skills will follow. (Koegel, 2006)

Out of the four pivotal behaviors, the one that has been most significant in my experience is motivation, and most importantly the student being socially motivated by their therapist. If a child with autism is motivated to spend time with their direct therapist, then they are much more willing to behave and learn, as they see their therapist's direction as something positive rather than work. Normally in ABA we have a reinforcer that is the motivation to complete the task, such as a piece of candy. But if the child enjoys the time with the teacher, then the teacher is the reinforcer. The child is happy to do what is required because they believe that the time spent with the teacher will be fun. It is important to gain motivation first before adding stressful demands such as discreet trials and pushing socially appropriate behavior, as this would be getting off on the wrong foot, and decrease the likelihood that the teacher will become reinforcing. If the motivation is established first, then these other demands can be increased later, with a higher likelihood for success. Problem behaviors will go up and learning will not if too many demands are placed all at once on a child with severe behavioral and learning issues.

So then, how do we gain the motivation of the child? We could first work in a natural environment teaching format which is more enjoyable for the student and less stressful. Stuart (1996) says that we should, "Teach in natural environments that contain the cues and reinforcement which

prompt and maintain learned behaviors whenever possible." The child becomes motivated to interact with the teacher once they trust the teacher and enjoy the time spent with the teacher. It is forming a bond with the student. When a new teacher is working with the child, demands should be low. Placing strong demands early with a child can cause mistrust from the child. If they believe that the teacher is there only to make them do things that they don't want to do, then the chances of the child being motivated are low. The teacher gains the trust and motivation of the child through advocating for the child. The teacher should be in tune with the needs of the child and be perceptive, because people with autism often have trouble communicating. The teacher can help the child to get what they want while teaching them to communicate with their needs. It is important to play with the child and not always dictate how they should play, because then it isn't very fun for them. Often children with autism do not want to play the game that you want them to, such as a board game. So, it is important to try to bond with them on their terms at first. Stuart states that we should,

"Maintain a current list of the individual's strengths and interests. Include preoccupations and fascinations that may be considered "bizarre" or strange. Use these strengths and interests as the foundation for gradually expanding the individual's repertoire of skills and interests." (1996)

The therapist should let them be themselves and play how they want to, and try to interact. Once the child is motivated by the teacher and is developing an attachment, demands can be increased. Work can be increased and the child can slowly be pushed to act in a socially appropriate manner. Once they care what you want them to do, it can be much more successful.

I have found in my work that treating autism by first improving social motivation can be very successful. The problems in autism that result from a lack in social motivation are huge. As a therapist I want the child to care about my approval. It limits my ability to help the child if the child only cares about trading in for a toy. In improving the child's social motivation, I am giving them a more natural way to care about the world around them, and giving them a set of tools in life that can cause their continued success in dealing with the challenges that they face as a person with autism.

Having found support for what my intuition led me to try out, my research into this topic will continue in my career as a BCBA. I believe that a guide to socially reinforcing interventions should be created and tested, to investigate the positive effects that can be produced with children with autism, behaviorally and educationally. It seems to me that since everyone knows one of the key components to autism is a difficulty in social interaction, it should be a key focus of our research, and possibly more importantly, a key focus in our direct interaction with the children. Perhaps a reason that it isn't focused on more in ABA is that it would require a much more interactive approach, rather than the common experiment-style interventions that is more common in ABA. But we can't lose sight in the main goal of

our field, which is to help improve the lives of people with autism. In my opinion, we should be doing whatever will help them improve their lives.

References

1. Chevallier, C., Kohls, G., Troiani, V., Brodtkin, E. S., & Schultz, R. T. (2012). The social motivation theory of autism. *Trends in cognitive sciences*, 16(4), 231-239.
2. Koegel, R. L., & Kern Koegel, L. (2006). *Pivotal Response Treatments for Autism: Communication, Social, and Academic Development*. Brookes Publishing Company. PO Box 10624, Baltimore, MD 21285.
3. DiCicco-Bloom, E., Lord, C., Zwaigenbaum, L., Courchesne, E., Dager, S. R., Schmitz, C., ... & Young, L. J. (2006). The developmental neurobiology of autism spectrum disorder. *The Journal of Neuroscience*, 26(26), 6897-6906.
4. Stuart, R. (1996). Motivating students who have autism spectrum disorders. *The Reporter*, 1(3), 1-3.

