

# **AUTISM SPECTRUM DISORDER SERIES**

# Making Connections: Teaching Parents Classroom and Therapeutic ABA Strategies to Improve Quality of Life for Children with ASD and their Families

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This issue of **NASET's Autism Spectrum Disorder series** is written by Josefina Beyra from Florida International University. The focus of the article is on teaching parents various classroom and therapeutic ABA strategies to improve quality of life for children with ASD and their families. Parents of children with Autism Spectrum Disorder (ASD) experience high levels of stress due to sacrifices in daily living and their children's problem behaviors. Though very little can be done to lighten the burden of raising a child with a disability, it is possible to increase the quality of life of families with children in the spectrum. The most effective intervention for increasing positive and appropriate behavior in children with ASD is Applied Behavior Analysis (ABA). This common intervention for children is widely known and used in both the classroom and in therapy. Research available on parent training in ABA focuses on learning outcomes of children with ASD. This literature review analyzes the effects of family-friendly ABA programs and parent training in ABA strategies on quality of life and potentially higher learning gains.

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#### **Abstract**

Parents of children with Autism Spectrum Disorder (ASD) experience high levels of stress due to sacrifices in daily living and their children's problem behaviors. Though very little can be done to lighten the burden of raising a child with a disability, it is possible to increase the quality of life of families with children in the spectrum. The most effective intervention for increasing positive and appropriate behavior in children with ASD is Applied Behavior Analysis (ABA). This common intervention for children is widely known and used in both the classroom and in therapy. Research available on parent training in ABA focuses on learning outcomes of children with ASD. This literature review analyzes the effects of family-friendly ABA programs and parent training in ABA strategies on quality of life and potentially higher learning gains.

#### Introduction

Every family has strengths and weaknesses that challenge parents and caregivers on a daily basis. Parenting, as the old saying goes, does not come with a manual. Raising children consists of trials that are as unpredictable as life itself. The added responsibility of raising a child or multiple children with Autism Spectrum Disorder (ASD) makes parenting that much more overwhelming. The results of a recent study on families with children on the spectrum show that these particular parents experience higher levels of stress than other families with or without a disability other than ASD (Huang et al., 2014). While all children require extensive love and care for proper development, raising a child with ASD is extremely demanding and goes beyond the typical process of child rearing. Children on the spectrum require a variety of the rapeutic services, extensive school meetings, numerous visits to doctors and specialists as well as medications for issues related to lack of sleep, gastrointestinal problems, behavior, etc. Health care and interventions can be time consuming and expensive. Results from a study focusing on financial impact related to autism show that families with children with ASD experienced greater financial issues, employment burdens, personal health issues, and incidences of depression (Vohra et al., 2013). Marital strife is an additional hardship that spectrum families encounter with a "prolonged period of vulnerability to divorce" (Hartley et al., 2010, p. 450). Caregivers that are highly stressed unintentionally can even hinder their own children's improvement (Osborne, 2008). As families collapse under the stress, so do interventions, as they may start to feel counterintuitive to parents.

One of the leading interventions that parents of children with ASD use is Applied Behavior Analysis (ABA). This particular intervention focuses on improving behaviors and learning in children with ASD. ABA is the most well-known, evidence-based intervention for autism (Matson et al., 2012). Unfortunately, it is also a time-consuming and costly method for families. Parents become highly involved in the therapies and sacrifice greatly financially, physically and emotionally for their children's ABA therapies. Yet parents sometimes know little about ABA or how to use ABA strategies. Though there is plenty of research on interventions for autism, very few focus on parental impact on the effectiveness of these treatments (Karst, 2012). Less seems to be known about the impact that stress—due to competing priorities such as finances, healthcare, employment, and time management—has on family life. Likewise, little is known about the impact of caregiver education on a child's disability. It is possible that a family's quality of life is diminished when parents must contend with multiple responsibilities vying for their attention and when ABA practitioners and special education professionals do not focus on providing caregivers with instruction on effective strategies.

## **Purpose**

The purpose of this paper is to review the literature that focuses on: (a) parent training in ABA strategies, (b) for the improvement of quality of life in the home and daily living and (c) generalization of skills learned in the classroom and ABA therapy programs. Children with ASD that are immersed in intensive ABA intervention—at school, home, or clinical therapy—have great prospects. For intervention to be effective in improving the lives of ASD children and their families, parent education must have priority. It is critically important that parents are given instruction in ABA strategies that school and therapy professionals use in order to achieve a continuous and strategic flow of treatment. It is imperative for parents to understand basic principles of ABA so that children can practice acquired knowledge naturally in the home. This will inevitably increase learning, and most significantly, familial bonds and quality time.

## Methodology

For a comprehensive understanding of meaningful literature on parent training in ABA, articles were selected by searching the education and psychology databases PsychINFO and ERIC. The terms "autism," "parent," "training," and "applied behavior analysis" were used to find the most relevant research. Final selection was based on articles from peer-reviewed publications in scholarly journals from 2005 to 2015. Using a traditional approach, this review summarizes the findings of current, experimental studies on the effects of parent training in ABA on the learning outcomes related to daily life issues of children with ASD. The results of this research were analyzed in order to determine possible implications for professionals who employ ABA strategies.

#### Results

#### **Collaborating with Parents**

Research showed that parents are seriously affected by the troubling behaviors of their children with ASD (McStay, Trembath, & Dissanay ake, 2014). The Double ABCX Model of Family Adaptation was employed to analyze its potential in predicting stress in parents (McStay, Trembath, & Dissanay ake, 2014). The results of this particular aspect of the study identifies the "externalizing behaviors" by children with ASD a critical indicator of stress and quality of life for the family, specifically for mothers (McStay, R. L., Trembath, D., & Dissanay ake, C., 2014). In light of these findings, it is important for families to select evidenced-based interventions that address behavior such as ABA.

An effective ABA program will take into consideration family dynamics, including strengths and weaknesses of parents (Park, Alber-Morgam, & Fleming, 2011). Park, Alber-Morgan, and Fleming make a critically insightful statement: "parents can provide important insight about how a child's challenging behaviors affect and are affected by the family" (2011, p. 23). Park, Alber-Morgan, and Fleming (2011) suggest a process in educating and integrating parents into the behavioral treatment plan of their children. Essentially, the process creates a bond between parents and their providers (Park, Alber-Morgam, and Fleming, 2011). The process achieves a sense of equality among everyone involved that is conducive to growth and improvement much needed in families of children with ASD.

#### **Applications in Daily life**

Improvement becomes evident when behavioral interventions can be applied in ordinary routines of daily life. While every child with ASD is different and exhibits a wide range of characteristics related to ASD, most families struggle with similar issues such as communication, social interaction, sensory processing issues (especially with food), and behavior issues. These issues can be categorized respectively as behaviors of externalizing or internalizing—two types of problem behaviors that cause great distress amongst parents (Zaidman-zait et al., 2014). ABA therapy incorporates a series of strategies and a variety of programs to teach appropriate behaviors and decrease inappropriate ones. In a study on script-fading, researchers investigated the effectiveness of this ABA strategy in the hands of parents (Reagon and Higbee, 2009). Scripts are used by ABA professionals to teach children with ASDto "initiate and respond to interactions with others" (Reagon and Higbee, 2009, p. 659). Respectively, when communication skills are mastered, the scripts can be eliminated or "faded." Reagon and Higbee studied the effects of scriptfading practiced by parents (2009). In the study, parents were taught the method of script fading through the use of recorders and ABA practice of modeling and using prompts (Reagon and Higbee, 2009). Children were prompted by their mothers to play and shared with their children different scripts for particular toys (Reagon & Higbee, 2009). The results of the study show that children with ASD can learn to initiate appropriate play and verbal interaction while providing evidence that training parents in ABA will improve parent-child communication and social interaction.

While communication is definitely an issue of critical importance in the lives of spectrum families, there are other challenges that are sometimes overlooked but are a key source of stress in the home. For example, picky eating can create anxiety among family members. In many cultures, food typically brings the family together. Dinnertime is valued for its bustling conversations and sharing with one another.

For families of children with ASD, this is not always the case. This issue is further explored by Se iverling et al. in their study on parent training and food selectivity (2012). Seiverling et al. point out that there is not enough focus on training caregivers who have the responsibility of feeding their children (2012). Their study reviewed the behaviors of both the parent and the child and designed various baseline assessments in preparation for the experiment (Seiverling et al., 2012). The experiment used task analysis—an ABA strategy for breaking down complex tasks—to teach the parent how to conduct a taste session (Seiverling et al., 2012). The results showed great improvement in "bites" and number of foods accepted by the children (Seiverling et al., 2012). This study shows that parent training in ABA can greatly improve essential components of daily life for both parents and children with ASD. Increasing one's food repertoire allows parents the freedom to take their children out to eat and attend social gatherings with family and friends without feeling stressed about their child's food aversions or inappropriate behaviors.

Food selectivity is not just a sensory issue but also behavioral one. Sometimes children with ASD simply do not want to do certain things and continually exhibit non-compliance. This is another area that parent training in ABA can alleviate much stress. Miles and Wilder conducted a study to investigate the application of behavioral skills training (BST) in parents of children with issues in compliance (2009). The experiment consisted of training the parent to follow a series of ABA techniques such as making eye contact, presenting an instruction once and making a demand not instead of asking (Miles and Wilder, 2009). While the results of their experiment had some limitations, it did show that parents could easily be trained to effectively use ABA strategies to teach compliance (Miles and Wilder, 2009).

#### **Innovations in Parent Training**

The research presented throughout this review shows a variety of applications for ABA strategies that can be useful for training parents. The question now becomes how to train parents. Parents of children with ASD are already spread thin among school, therapies, doctors' appointments, and other aspects of life. A formal training program seems unrealistic. For this reason, Jang et al. examined the use of an electronic training program to educate parents in ABA methods (2011). Their study showed promise in the use of web-based learning programs due to their accessibility, convenience, cost-effectiveness, and thorough overview of ABA (Jang et al., 2011). Though some limitations were observed regarding the lack of immediate feedback, participants in the study appreciated the consistency of the program, visual components, and the knowledge they gained (Jang et al., 2011). A higher appreciation and awareness of ABA yields higher participation and understanding of a child's programs.

#### **Discussion**

The studies reviewed above provide significant support of parent training in ABA strategies. However, most research continues to focus on learning outcomes of children with ASD without considering even higher learning gains with improved homelife due to parent training. Moreover, the studies in this review only focus on children revealing that more research is needed on the related services provided to adults with ASD, their parents and other potential caregivers. A study of stress factors related to autism indicates that aggravation in parents increases when a special needs person has aged out of schooling and related services for their disability (Mao, 2012). Additionally, though research is scarce on autism throughout the lifespan, it is known that regression may occur upon the transition of exiting the school system (Mao, 2012).

#### Conclusion

In general, the findings analyzed in this literature review have serious implications for professionals working with children with ASD as well as their families from the moment of diagnosis through adulthood and beyond. Future research should focus on the integration of parent training and support in ABA programs for the purpose of stress relief in the home. Research of this nature should greatly affect goals and programs created by ABA analysts as well as special education staff and coordinators of Individual Education Plans (IEP). Parent and caregiver training, as well as family interaction should be considered in a child's IEP and therapeutic behavior plans. Consequently, professionals in this field will require more in depth training in ASD behaviors that affect family dynamics and effective methods of training parents to cope and apply ABA strategies throughout the lifespan of their children with ASD.

Educating parents and families in ABA strategies should be of high priority to improve quality of life while promoting developmental success. Some of the research seems to be lacking a human element. Parents are not robots. For parents to become effective "agents of intervention," as described in most of the aforementioned research studies, intervention must also be nurturing for parents with a family -friendly approach.

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