

Behavioral Supports for Individuals with Intellectual and Developmental Disabilities

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## BEHAVIORAL SUPPORTS

Behavioral supports have become a very important part of helping individuals with intellectual and developmental disabilities. In the past, aversive procedures have been used to correct behaviors and over time have proven not to reduce behaviors (Arc, 2010). Research continues to grow in the area of behavioral supports and it is important that these supports are used in all settings (Arc, 2010). Behavioral supports are more than just improving a behavior; they are about respect and improving relationships (Matson, Neal, & Kozlowski, 2012).

Individuals with intellectual and developmental disabilities can have many different types of behavior problems. Behaviors often differ depending on the severity of the disability. In order for these individuals to lead a healthy and productive life, it is important for supportive interventions to be in place (Arc, 2010). There are many different types of supports used with individuals depending on the behaviors being exhibited (Matson et al., 2012).

The purpose of this paper is to provide research based behavioral supports that can be used with certain behaviors with individuals of intellectual and developmental disabilities. The major topics that will be addressed are self-injurious, aggressive, and off-task behavioral supports. This paper will conclude with a discussion of these three behaviors and their supports and the implications for educators.

### **Self-Injurious Behaviors**

Self-injurious behaviors are often a problem with some individuals with intellectual disability (Matson & Turygin, 2012). There are different definitions of self-injurious behaviors, but over all they cover behaviors that cause harm to the individual. Matson and Turygin (2012) defined it as behavior that causes physical harm and is often repetitive in nature. Sometimes these behaviors are called challenging behaviors, which are also considered behaviors that are

## BEHAVIORAL SUPPORTS

frequent and cause harm to one's body (Evers & Pilling, 2012). Self-injurious or challenging behaviors may include head banging, excessive scratching, picking or poking at skin, hair pulling, or other behaviors that an individual does to oneself.

Many times these behaviors are seen in individuals with significant intellectual disabilities. Conterio & Lader (1998) suggested that only 1 % of the population exhibits "habitual self-injurious behaviors" (p. 1). Self-injurious behaviors can be seen in individuals with developmental disabilities as well (Matson, et al., 2010). These behaviors normally have high frequency, intensity, and duration (Evers & Pilling, 2012). Many factors can cause self-injurious behaviors.

Most research on self-injurious behavior focuses on functional assessments rather than interventions. General PBS is mentioned in some research as a way to improve these behaviors. Evers and Pilling (2012) presented a method of evaluating and planning to help assess and provide interventions for self-injurious behaviors. First there should be a pre-assessment, to help to figure out the cause or antecedent of the behavior. Part of the pre-assessment is also figuring out risk, best interest, and quality of life (Evers & Pilling, 2012). Once a pre-assessment is complete, the individual would then go through a functional assessment, which could lead to referral to other services or lead to a planning meeting (Evers & Pilling, 2012). Meetings are held to agree on interventions, then behavior plans are created. Evers and Pilling (2012) suggested that training in programs such as behavioral support in the area of Intellectual Disabilities, are very important to help serve individuals with self-injurious behaviors.

Along with the importance of assessment, it is also important to ensure teachers have appropriate training. Jasper and Morris (2011) conducted research on nonsuicidal self-injurious behavior (NSSIB) and the training the teachers had received to help their students. Surveys were

## BEHAVIORAL SUPPORTS

sent to 1,800 public schools and 390 special educators responded. They were asked questions regarding the number of students they had with self-injurious behaviors. Jasper and Morris (2011) used the NSSIB Special Educator Survey and a questionnaire to understand the experience. Teachers received training in either undergraduate, graduate, or workshops. Teachers who have had training reported to be more confident in identifying those with self-injurious behaviors (Jasper & Morris, 2011). Teachers were also asked what interventions were used with their students. The teachers reported that most commonly students were referred to other professionals. Other interventions mentioned by teachers were discussing reasons of behavior with students and replacing the behavior (Jasper & Morris, 2011). This study concludes it is important to have trained teachers working with individuals with self-injurious behavior.

Assessment and training are mentioned in many different studies as being very important to help come up with interventions. Carr and Durand (1985) looked at functional communication training as an intervention for disruptive behavior, which included self-injurious behaviors. Functional communication training is teaching students, phrases to ask or say to help decrease a behavior that has a social function (Carr & Durand, 1985). First, Carr and Durand (1985) conducted functional assessments to figure out the cause of the students' behavior. Once behavior causes were determined, they conducted a second experiment in which they implemented functional communication training. Students were either given a difficult task with 100 % adult attention or an easy task with 33% adult attention. During the difficult task if the student had an incorrect response the person would tell the child and then follow a guideline that involved different steps depending on the response of the child. During the easy task students were asked if they had any questions every 30 seconds, then followed a guideline based on student response. Throughout the training students were taught the responses that the examiners

## BEHAVIORAL SUPPORTS

responded to (Carr & Durand, 1985). The study showed that by teaching students relevant responses helps to decrease behaviors to low levels (Carr & Durand, 1985). Often individuals who have self-injurious behaviors also have communication needs. By using functional communication training, teachers can teach their students responses that are appropriate and decrease the behavior.

To summarize, self-injurious behaviors can present in many different ways. Research studies tend to present more on ways to understand the behaviors instead of ways to treat or decrease the behavior. Evers and Pilling (2012) presented information on the importance of functional assessment and understanding the behavior. By understanding the behavior, teachers can then look at different interventions that help the specific function. Jasper and Morris (2011) conducted a study on training of teachers and expressed the importance of training for professionals working with these individuals. Carr and Durand (1985) presented functional assessment as well as an intervention based on the specific needs of the students. They presented information on functional communication training and how it helps decrease behaviors.

### **Aggression**

Anger and aggression can be seen in individuals with intellectual and developmental disabilities. Definitions of anger vary depending on the study. Singh et al. (2011) defined anger as “emotional arousal” (p. 2691), which could be seen through health symptoms such as heart rate, feeling hot, and facial expressions and features. Crocker (2006) discussed how aggressive behaviors can really limit social interactions and causes problems in that area. Crocker (2006) described aggressive behavior as behavior that is verbal or an action toward other people, places, or themselves.

## BEHAVIORAL SUPPORTS

Aggressive behavior can occur with many different disabilities. Crocker (2006) suggested that in individuals with ID the rates increase for those in institutional settings. Matson (2009) presented information on autism and aggressive behavior. In his review of treatments, he discussed treatments that took place in a variety of locations. Matson (2009) also looked at studies that covered a variety of frequency, duration, and intensity. The frequency, duration, and intensity of aggression often depend on the individual and the disabilities, along with antecedents and consequences. The nature of the behavior can also vary depending on all the criteria mentioned above.

Aggressive behavior is common among individuals with intellectual disabilities and developmental disabilities such as autism. Crocker (2006) conducted a study on adults on the types and severity of their aggression. The individuals' aggression was measured using the Modified Overt Aggression Scale over a 12 month period (Crocker, 2006). They concluded that the most common behavior was yelling out. Crocker (2006) also concluded that behaviors are more common in residential settings with adults.

There are many different interventions that can help people with aggressive behavior. The most common is using functional assessment. Hagopian, Bruzek, Bowman, and Jennett (2007) conducted a study with two children with autism that have aggressive behaviors such as hitting and kicking. Hagopian et al. (2007) used many different interventions to help improve behavior, by conducting this, first it helped to lead to other interventions to help improve behavior. Thompson, Fisher, Piazza, and Kuhn (1998) also used functional analysis to help decide on other interventions with a child with intellectual disabilities.

Thompson et al. (1998) also conducted a study using functional assessment to assess the degree of aggression in a student with intellectual disability. They used functional assessment to find

## BEHAVIORAL SUPPORTS

the operant condition of the behaviors to better address the students need. After conducting the functional assessment and analysis they were able to apply interventions to improve the aggressive behavior exhibited by the student.

Hagopian, Wilson, and Wilder (2001) conducted a study on a 6 year old boy with autism who had mild intellectual disability. Two different functional analyses were used to determine the purpose and cause of behavior. Hagopian et al. (2001) used this information to then find an intervention and implement it. All of these studies used functional analysis and assessment to determine the antecedents of behavior. This information was then used to develop interventions to improve aggressive behavior in students with intellectual and developmental disabilities.

Another behavior support that is used with aggression is reinforcement. Reinforcement can be used in many different ways. There is, for example, noncontingent reinforcement, social reinforcement, and reinforcing appropriate mands. Hagopian et al. (2007) used reinforcing appropriate mands along with noncontingent reinforcement. By using these two types of reinforcement after a functional analysis, they were able to see whether or not reinforcement worked for the two students.

Vollmer, Borrero, Lalli, and Daniel (1999) conducted a study using reinforcements for appropriate mands. This study was different because it looked at how reinforcement played a role in the behavior itself. Vollmer et al. (1999) presented how reinforcement can continue to increase a behavior unless the reinforcement is used in a manner to help decrease the behavior. Hagopian et al. (2001) also conducted a study in which negative reinforcement and positive reinforcement maintained the problem behavior. By combining noncontingent reinforcement with another intervention the study shows how noncontingent reinforcement can help decrease aggressive behavior (Hagopian et al., 2001).

## BEHAVIORAL SUPPORTS

Aggressive behavior can be found in individuals with intellectual and developmental disabilities. The behavior can be found in a variety of settings and manifest in a variety of ways. It is important to understand supports that can help understand and decrease the problem behavior. Using functional analysis and assessment teachers and care givers can better understand the aggressive behavior. Functional analysis and assessment, help to produce an understanding that leads to good intervention. It is also important to look at reinforcement. Reinforcement can be used to decrease a problem behavior, but it can also increase a behavior.

### **Off-Task Behavior**

Individuals with intellectual disabilities and developmental disabilities can have many problem behaviors. Some individuals have very severe behaviors while others have problem behaviors such as off-task behaviors that are normally academic related. Off-task behaviors are often related to academics as well as problems with attention (May & Howe, 2013). Off-task behaviors can also include being engaged in task whether its school work, or some other task (Palmen & Didden, 2012). Many different problems can cause off-task behavior. Just as with aggression and self-injurious behavior, it is important to understand all aspects of off-task behavior.

Off-task behaviors are most common in academic settings, but can occur in other settings. Depending on the exact behavior and setting determines the frequency and duration of the behavior. The function of the behavior can influence the intensity and frequency of a behavior (May & Howe, 2013). The more students are engaged in activities they prefer, the less likely they will engage in off-task behaviors (Foster-Johnson, Ferro, & Dunlap, 1994).

Students with autism spectrum disorder (ASD) often either have trouble with off task behavior, or seem off task due to other behaviors. Part of off task behavior is interaction with

## BEHAVIORAL SUPPORTS

peers and adults. Gelbar, Anderson, McCarthy, and Buggey (2012) discussed how ASD can influence behavior through interactions. Another factor that can influence off task behavior is impulsivity, which many individuals with intellectual and developmental disabilities have trouble (Grey, Healy, Leader, & Hayes, 2008).

Behavior supports are very important in the academic setting to help decrease off-task behaviors. There are many different supports and often times the support depends on the behavior itself. One type of support is using differential reinforcement of alternative behavior (DRA) to decrease off-task behavior. May and Howe (2013) conducted a study on a preschool age child with intellectual disability. Assessments were conducted to learn more about the off-task behavior of the child. After assessments, the decision was made to use DRA as a support to improve the behavior. During the study the student was provided with a book and an item related to the book to help involve the child as well as prevent escape from the activity. Data showed that by using a DRA, the student's off-task behavior decreased (May & Howe, 2013).

Often students are off-task because of lack of interest. Behaviors begin to happen because the student is not engaged. Foster-Johnson et al. (1994) presented a study on preferred activities. First assessments were given to figure out what students preferred. Then after assessments a reversal design was used to see if problem behaviors decreased with preferred activities versus non-preferred activities (Foster-Johnson et. al., 1994). The study results showed that by using preferred activities, students' off-task behavior decreases. By giving students preferred activities, it decreases the amount of inappropriate behavior because the students are engaged.

Students with ASD often have behaviors that can affect academics and be related to off-task behaviors. Gelbar et al. (2012) used video self-modeling as their specific intervention for improving social skills, communication, behavior, and task instruction. Students with ASD often

## BEHAVIORAL SUPPORTS

struggle in multiple areas and it is important to understand all the areas and understand the connection that often exist between the different areas of need. Gelbar et al. (2012) presented video self-modeling as an evidence-based intervention to help these students succeed.

Part of off-task behavior can stem from wait time that is required in classrooms. Grey et al. (2008) conducted a study with one student who exhibited behavior during wait time. A Time Timer was introduced to the student along with a red card. These two items were used during wait time to help the student understand and see how much time was left (Grey et al., 2008). At first, the red card was used by itself then during phase 2 the time timer was used. The results showed that overall wait time increased for the student, although it increased the most with the Time Timer (Grey et al., 2008).

Off-task behaviors are common in many students with disabilities including intellectual and developmental disabilities. Off-task behaviors can stem from many different academic-related tasks. Students often have trouble with attention which then affects their behavior in class. Students with ASD have difficulty in many areas which often affect their behavior and they become off task. It is important to conduct assessment to better understand the behavior as well as have many different supports to choose from. Preferred activities, video self-modeling, and time timers are just a few supports available to teachers. By using these different interventions teachers are able to decrease off-task behaviors in the classroom.

## **Discussion**

Individuals with intellectual and developmental disabilities have many challenges in their lives. One of the many problems can be behavior problems. Individuals often experience one or

## BEHAVIORAL SUPPORTS

more of the following behaviors: self-injurious, aggressive, or off- task behaviors. Behavioral supports are very important in helping individuals decrease these behaviors.

This paper presented information on all three behavior areas and interventions that can help to decrease behaviors. One extremely important part of behavioral supports is assessment. Many different research studies presented information on assessment and the role it plays in all these behaviors. It is very important to understand the function of a behavior, before trying to implement an intervention.

Another common theme is making sure the intervention works with the actual cause of the behavior. This goes back to the understanding the function. The different studies (e.g., Carr & Durand, 1985; Evers & Pilling, 2012; Thompson et al., 1998) presented information on how first the function must be understood, and then the intervention can be chosen to suit the behavior. Reinforcement is one way of improving aggressive behavior, yet is also a part of improving off-task behavior through preferred activities. Yet these interventions may not work for all behaviors and all students.

It is also important to understand that often times a replacement behavior or a skill is being taught. Many of these interventions (e.g., video self-monitoring and communication training) are about teaching students ways to handle their own behavior. Interventions are often put in place to replace the behavior with a better alternative or a way to handle the behavior.

Behavioral interventions have changed drastically over time. They have gone from interventions such as shocking someone to video self-modeling. Interventions now are much more than just a simple support. First there must be some form of assessment to understand the behavior, then supports are implemented that best fit the student and behavior. Behavior supports are now about empowering the individual in the most appropriate manner.

## BEHAVIORAL SUPPORTS

### **Implications**

Individuals with intellectual and developmental disabilities are a part of the educational setting. These individuals are seen all throughout our schools whether it is in a self-contained setting or a full inclusion setting. It is important for teachers to understand self-injurious, aggressive, and off-task behavior as well as supports that work best for these behaviors.

Teachers are often around these individuals for the majority of the day. Monitoring is a very important part of improving these behaviors (Arc, 2010). Teachers are often the person in charge of monitoring the behavior and intervention. Because of this, teachers need to have a clear understanding of how the intervention can affect the students' behavior as well as a clear understanding of the function of the behavior.

As research continues to grow in the areas of self-injurious, aggressive, and off-task behaviors, it is important for teachers to stay informed. Times have changed and will continue to change. Teachers often play a key role in these individuals' lives and they must be aware of supports for these behaviors.

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## BEHAVIORAL SUPPORTS

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## BEHAVIORAL SUPPORTS

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