



## **Behavioral Interventions for Children with Autism Spectrum Disorder- A Scientific Validation**

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### **ABSTRACT:**

Autism spectrum disorders (ASD) are characterized by repetitive and stereotyped behaviors. These behaviors include rocking, shaking arms, and manipulating objects. They serve to regulate an individual's physical and sensory experiences. Treatment options for reducing stereotypies can be intrusive, such as psychotropic medication and intensive behavioral interventions. The effectiveness of these treatments is measured by the number of stereotypical episodes observed over a period of time. Behavioral interventions aim to encourage appropriate behavior and discourage inappropriate behavior. Therapists, teachers, and parents break down desired behaviors into achievable tasks and teach them in a structured manner.

Behavioral interventions can significantly improve core features of autism, such as difficulties in social communication, social interaction, and rigid and stereotyped behavior patterns. In addition, researchers say that behavioral interventions can lead to recovery in some autistic children.

Content validity of this intervention was established in consultation with guide, co guide, nursing experts in the field of psychiatric nursing and psychiatric medicine. The expert's suggestions were incorporated in designing the final intervention for the study in consultation with Guide, Co-guide and Advisory Committee members for its appropriateness.

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**Keywords:** Behavioral Interventions, Children, Autism Spectrum Disorder

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### **Introduction & Creating trust worthy relationship:**

Trust worthy relationship created by explaining the purpose of intervention during the first meet among parents of children with autism spectrum disorder. Help children feel secure and loved, which gives them confidence to explore their world, try new things and learn. Give children the skills they need to build healthy relationships of their own. And strong and positive family relationships are enjoyable for their own sake – it just feels good to be part of a warm and loving family. Antecedent exercise typically involves instructing and providing opportunities for autistic children to engage in some form of exercise (e.g., aerobic activity).

#### **Distraction with objects:**

Clay toys & sensory toys used as distracting object. Toys classified as “matched” were those that made sound and toys classified as “unmatched” were toys that did not make sound. The presence or absence of these toys was planned for each condition, because vocal stereotypy was hypothesized to be maintained by auditory stimulation.

#### **Removing sensation:**

Auditory, Visual and Tactile undesired stimuli removed from the ASD Children.

#### **Environmental enrichment:**

Environmental enrichment involves providing free access to high-preference stimuli which compete with the hypothesized stimulation of the target behavior. Environmental enrichment, in the form of Sensory Enrichment Therapy, pairs different types of sensory and motor exercises on a daily basis. Varied textures, such as plastic turf doormats, aluminum foil, sponges, artificial flowers, adhesive tape, and bubble wrap, used to stimulate the sense of touch.

#### **Continuous access to items of matched stimulation:**

Providing continuous access to items of matched stimulation involves systematically identifying an item which provides the same reinforcing properties as stereotypy or repetitive behaviors.

**Non-contingent access to items of matched stimulation:**

The use of matched stimulation has also been used as a reinforcement-based treatment whereby the item of matched stimulation is provided non-contingently.

**Positive reinforcement:**

- ✓ Includes smiling, preferred activities like playing with toys, verbal praise & tokens (stars for completed tasks)
- ✓ Looking at what has motivated the child in the past
- ✓ Asking the autistic children what they like and dislike
- ✓ Food-related activities (special treats - not food they have the right to access anyway)
- ✓ Desired objects (if affordable)
- ✓ Privileges (e.g., team leader for a day or week; certificate; badge; choice of outing)
- ✓ Tokens (e.g.: a special trip when the child earns five gold stars on the fridge).

**Functional communication training:**

Functional Communication Training involves teaching appropriate communicative responses to obtain the desired reinforce, thus providing the participant with a more efficient method of obtaining the reinforcement, than engaging in challenging behavior.

The first step is a detailed functional assessment of a child's difficult behaviour. The next step is starting the therapy. This involves:

- Deciding on a more appropriate way for the child to communicate
- Systematically teaching the child the new communication skill
- Reinforcing the child's behaviour whenever the child uses the new skill
- Ignoring the difficult behaviour whenever it happens
- Prompting or reminding the child to use the new skill when appropriate.

**Differential reinforcement:**

Differential reinforcement is a reinforcement-based treatment which involves the delivery of reinforcement contingent upon the absence of challenging behavior (DRO); the presence of an alternative, appropriate behavior (DRA); occurrence of a behavior which is incompatible with the target behavior (DRI); low rates of behavior (DRL); and high rates of behavior (DRH). Differential reinforcement consists of two parts: (1) Withholding reinforcement for the challenging behavior and (2) Providing reinforcement for an appropriate replacement behavior.

**Self-management:**

Participants are taught to manage their own behavior by recording the occurrence and non-occurrence of the target behavior. It may also include self-reinforcement whereby the participant controls their own access to reinforcement for appropriate behavior. Steps for implementing a self-management system include:

1. Preparing the system
2. Teaching the individual to use the system
3. Implementing the system
4. Promoting independence for the individual.

**Stimulus control:**

Behavior occurs in the presence, but not in the absence, of a discriminative stimulus. In the example above, a person is more likely to engage in the behavior, opening the oven door, more often when the discriminative stimulus, the beep is present. The beep is said to have stimulus control over opening the oven door.

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## **Response interruption and redirection (RIRD):**

RIRD involves interrupting the response and redirecting the individual to an alternative, topographically similar behavior.

### ***Response cost:***

Response cost involves the removal of a reinforcing stimulus contingent upon occurrences of the target behavior. Response cost is the term used for removing reinforcement for undesirable or disruptive behavior. It is a form of negative punishment. By removing something (a preferred item, access to reinforcement) decrease the likelihood that the target behavior will appear again. It is often used with a token economy and is best used when a child understands the implications.

### ***Overcorrection:***

Overcorrection procedures involve the study subjects repeat a specified behavior a number of times contingent upon occurrences of the inappropriate behavior. Overcorrection is a behavioral intervention and is based on the belief that the problem behaviors of children with autism spectrum disorders are maintained by social factors (e.g., attention from other people, escape, or avoidance of low-preference academic activities such as math) or nonsocial factors (e.g., sensory reinforcement).

### ***Extinction:***

Reinforcement is no longer provided contingent upon the occurrence of a behavior which has been previously reinforced. When a behaviour no longer gets what it wants (no longer obtains the reinforcing consequences that it used to obtain) it will reduce in frequency until it eventually stops occurring because the behaviour now serves no purpose. When the child screams and shouts, this behaviour no longer gets what he or she wants. Researcher could say that the screaming and shouting "doesn't work" anymore and so it will eventually reduce until it stops and becomes "extinct".

### ***Response blocking:***

The occurrence of the target behavior is blocked to prevent or stop its occurrence. Response blocking refers to physically preventing a maladaptive behavior from occurring. Typically, a clearly visible motor response is required for response blocking to be used. Maladaptive behaviors are maintained by sensory reinforcement or a desire for tactile, auditory, visual, or other stimulation. As a result, maladaptive behaviors often become habitual, automatic responses that are not easily self-controlled. Response blocking prevents a maladaptive response and provide feedback to the person that the behavior has occurred.

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## **Conclusion:**

Some forms of early intensive behavioral intervention may provide some benefits for some young autistic children, according to a very limited amount of good-quality research evidence. According to a very limited body of high-quality research evidence, critical response training may provide some benefits for some children on the autism spectrum. It is difficult to determine the value of other types of behavioral interventions, such as positive behavioral support or individual methods used in some types of rapid intervention.

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