AUTISM ADVISOR
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Using Pivotal Response Treatment (PRT) at Home Article 4: Responding to Multiple Cues

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Many children with ASD have been described as being very detail oriented or as having "stimulus over-selectivity" (Koegel et al., 1999, p177). They often seem to fixate on a specific detail. Frequently these details would seem unimportant to other children. If one of these details changes, the child with ASD may have difficulty with the situation, routine, object or person. For example, when Sally met a new therapist she called her 'Smiley'. Ten minutes later they were in the school library, Sally looked directly at the therapist, who was now not smiling, and said, "Where's Smiley?" Sally was identifying (over-selecting) the new therapist only by her smile. Other examples include the child with autism who could not recognize his teacher after she cut her hair having overly-focused on her hair as the identifying feature or the child who only completed a certain task when he wore his green sweatshirt because he happens to be wearing that specific sweatshirt in the picture on his visual schedule.

In general, children are expected to respond correctly to multiple cues or details. Everyday instructions often include multiple components. E.g. Please get your warm, red socks (2 components); or when you are done eating, put your plate, and cup on the counter above the dishwasher (5 components). The child with ASD may respond to only one of these components and may do best when instructions are one step at a time. This "over-selectivity" can lead to difficulties with social behaviour, learning language, and the learning and generalizing of new behaviours throughout the child's life (Rosenblatt, Bloon, and Koegel, 1995, as cited in Koegel, K.L., et al., 1999, p177).

Within-stimulus prompting

This strategy helps a child learn the specific detail that separates an item from other similar items. This specific detail is exaggerated to increase focus on it. (Shreibman, 1975 as cited in Koegel, L.K., et al., 1999, p177). For example, the detail may be bigger, louder, darker or coloured to make it stand out. The child is then taught to attend to that detail (cue). The exaggerated element is then faded back to its' original form.

Here are some examples:

When teaching a child the difference between the letter p and the letter q, the stem of the letters would be made thicker and longer to show the child what makes the two letters different.

The person's name label on his locker is coloured to make it stand out from name labels on other lockers.

Bold or italics are used to highlight key information in a written document.

Multiple features/attributes

Situations are set up so that the child must look for multiple features of an object. Situations may start with simple, known features and become more complex as the child becomes more adept at differentiating based on those features.

For example, Abby is asked to get a small spoon from the drawer which also contains large spoons, as well as small and large forks and knives. She must attend to both the size (small) and shape (spoon) of the object. Getting to eat her ice cream with that spoon then reinforces Abby.

The number of features a child is asked to look for is gradually increased, based on success with fewer features. For example, once Abby can find the blue DVD among DVD and video cases placed in front of her, another feature, such as location, can be added. When Abby asks to watch her favourite DVD, she is told to get the blue DVD from the shelf (blue, red and green DVD and video cases are on the shelf and more cases are on the table) requiring her to attend to three features: colour, shape and location. She can then watch the DVD. Once Abby is successful with three features, another feature, such as orientation, could be added. Now, Abby would be told to get the blue DVD lying on the shelf when there are different coloured DVD and video cases standing and lying on the shelf as well as more cases on the table.

The child learns to respond to more cues, if instructions with multiple features are consistently delivered (R. L. Koegel & Schreibman, 1977; Schreibman, 1988; Schreibman et al., 1996; as cited in Koegel, L.K., et al., 1999, p177).

Multiple step instructions

Learning how to complete multiple step instructions helps a child become more independent and decreases the time required to break down instructions into smaller steps. As with teaching multiple features or attributes, the child learns to follow a one-step instruction that leads to something they want. Once the child follows one-step instructions, a second step is added to the instruction.

The following illustrates increasing the number of steps in an instruction:

One-step instruction: "Put on your coat" (allowing you to help them put on their coat and go play outside with you).

Two-step instruction: "Pick up your coat and hang it up" (allowing the child to then access a preferred activity or other reinforcer).

Three-step instruction: "Turn off the television, go to the bathroom and wash your hands" (allowing the child to have snack).

Burke and Cerniglia showed that children with ASD were able to learn to follow instructions with up to four steps in a relatively brief period of time (1990, as cited in Koegel, L.K., Koegel, R. L., Harrower, & Carter, 1999, p 177).

As with teaching self-initiations, described in article 3, continue using the motivation strategies while teaching the child with ASD to respond to multiple cues. Burke and Cerniglia (1990, as cited in Koegel, L.K. et al., 1999) also demonstrated some generalized responses following the intervention period. The ability to respond to multiple cues in the environment may also increase the child's ability to access learning opportunities in their daily lives and decrease the need to break instructions down into single steps. This may allow the child to be involved more in typical peer groupings with less direct adult support required.