Repetitive behavior is a trademark characteristic of autism. This behavior can range from odd and harmless, such as hand flapping, to self-injurious and harmful. In *Effects of a Family-Implemented Treatment on the Repetitive Behaviors of Children with Autism*, researchers lead by Brian A. Boyd, Ph.D. at the University of North Carolina at Chapel Hill investigated a new technique for diminishing repetitive behavior.

They point out that even seemingly harmless behavior can have major effects on both the child and family. A child who is engaging in repetitive behavior may become socially isolated and miss out on learning opportunities or a child who plays repetitively and incorrectly with toys will miss out on the learning opportunities that accompany playing.

While little research has been done on interventions to decrease this behavior, there have been some studies conducted on using reinforcement-based interventions to decrease repetitive behavior in children with developmental disabilities.

The researchers identified two types of repetitive behavior:

- Non-functional behavior such as repetitively spinning the wheels on a toy car, and only showing interest in one topic
- Potentially functional behavior such as watching the same television show over and over

To intervene with the non-functional behavior, researchers gave the children an alternative behavior. For example, a child who flaps his or her hands was told to squeeze palms together as this motion cannot be completed at the same time as flapping.
For the potentially functional behavior, researchers used reinforcement to encourage a broader range of interests or use the interest in more appropriate ways. For example, a child who watched the same video over and over again would be praised for engaging in other activities or even just watching the video once at a scheduled time.

Researchers recruited five participants, ages 39-65 months, who engaged in repetitive behaviors that adversely affected their family lives. Each child exhibited both kinds of repetitive behaviors, which could be provoked with particular stimuli. Over 12 sessions, therapists and parents worked with children to either teach and reinforce the alternative behaviors or reinforce choices not involving the object of repetitive behavior.

Each session began with a probe as the therapist interacted with the child and a second probe with the parents interacting with the child.

After collecting baseline data during two sessions, the therapist showed the parents how to intervene when a repetitive behavior was taking place by verbally, or physically if necessary, directing the child to engage in alternative behavior. Parents also directed children to play with or pay attention to an object that was not part of the repetitive behavior and offered praise for playing with and choosing these alternative activities. Parents continued practicing the intervention at home when repetitive behavior took place.

While this study was very small, three of the participants showed great improvements in the reduction of repetitive behavior. The children also showed greater engagement in alternative activities, which could point to an increase in flexible thinking. While this intervention needs to be replicated at a greater scale, this study suggests that parents and teachers may be able to use alternative behaviors and reinforcement to help decrease repetitive behaviors.

References