



Response Inhibition

Response inhibition is the ability to cease or delay an action and to be able to reflect rather than display impulsive behavior. Simply put, response inhibition helps individuals to stop and think before acting. It also helps one to ignore outside interference. This skill allows a child to plan and display appropriate behaviors. Response inhibition is imperative in tasks such as maintaining safety, problem solving efficiently, and behaving in a socially appropriate manner. This skill is also needed for focusing on the task at hand, rather than reacting to other situations in the environment.

Home and School Situations Requiring Response Inhibition

- Raising one's hand before answering a question in class
- Waiting for one's turn to play in a game or to speak during a conversation
- Ignoring distractions while working on homework
- Putting a helmet on before getting on a bike
- Reading the directions before starting an assignment
- Dealing with a younger sibling who is annoying
- Completing a long, multi-step task
- Waiting in line at school or at a store
- Keeping oneself from falling back asleep in the morning
- Not talking back to one's parents when upset

Hints and Strategies to Improve Response Inhibition

- Have your child think about his answer to a question a few seconds before he verbalizes his answer. Teach your child to count to 10 before acting. Practice this by counting together out loud before making a decision.
- Arrange for your child to play games with other children that require him to wait for his turn. A game that involves patience is Chutes and Ladders, while a game that involves both patience and concentration, when counting the number of spaces to move, is Trouble. Chess can also be helpful to improve concentration and patience because the game requires constantly thinking about the next move.
- Take a break. Let your child take a break from a situation that is upsetting to him. Doing so will keep your child motivated and from growing upset and irritable. Your child may tend to become angry or upset and possibly give up on a difficult assignment if he is forced to complete it all at once. For example, if your child has to write a lengthy paper, giving him a 10 minute break will allow him to remove himself from the stressful situation and begin with a fresh start on it again after the break. Model the same procedure by showing your child how you take a break to handle a difficult or frustrating experience. Display your own strategies by walking away but later returning to solve a problem.

- Model response inhibition for your child. Talk to your child about the strategies that you use to exhibit response inhibition and self-control and then model these strategies. For example, you could tell your child “I really would like to watch TV... but I know I have to clean the basement first.” This will help show your child how to develop a form of response inhibition and structure.
- Review homework assignment directions with your child so that he knows what to do before starting. Discuss what needs to be done and help show him how to follow the directions. If a teacher assigns a worksheet, then have your child read the instructions to you and discuss them, rather than allowing your child to dive right in without reading.
- Encourage your child to play puzzle-based video games, such as Bejeweled, Tetris, and Bubblicious, in which he can earn bonus points by delaying a first response. Many of these puzzle games will reward patience when the player is able to combine a number of shapes that match or create a larger pattern rather than simply pairing the first two that fit with each other. Most importantly, ask your child to describe to you how he can earn the maximum number of points and from there, engage in a discussion about how inhibiting or delaying an action results in a higher game score.
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- Encourage high levels of activity during leisure time. Children who struggle with response inhibition often find themselves in trouble due to too much movement. Encouraging your child to exert himself when it is appropriate may help in getting him to sit still when necessary. Teach your child basic yoga, meditation, or breathing techniques. Learning one or more of these strategies can be very useful for children who act before thinking. Regular practice of one or two small techniques is something that can be used in a situation where the child tends to respond quickly and get into trouble. Teaching one or two yoga stretches may be particularly helpful for children with movement-based response inhibition difficulties. For example, learning the “mountain” and “sun salutation” poses (which essentially consists of standing with one’s hands extended above one’s head and breathing) can be very useful for delaying actions. Further information about a number of yoga poses can be found on <http://yoga.about.com>.

Books on Response Inhibition

Cooper-Kahn, Joyce, Ph.D. and Laurie C. Dietzel. (2008). *Late, Lost, and Unprepared: A Parents’ Guide to Helping Children with Executive Functioning*. Bethesda, MD: Woodbine House. [Chapter 11]

Cox, Adam J., Ph.D. (2007). *No Mind Left Behind: Understanding and Fostering Executive Control--The Eight Essential Brain Skills Every Child Needs to Thrive*. New York, NY: Penguin Books. [Chapter 9]

Dawson, Peg, Ed.D. and Richard Guare, Ph.D. (2009). *Smart but Scattered*. New York, NY: The Guilford Press. [Chapter 11]

Richard, Gail J. and Jill K. Fahy. (2005). *The Source for Development of Executive Functions*. East Moline, IL: Lingua Systems.

Schwarzchild, Michael. (2000) *Helping Your Difficult Child Behave: A Guide to Improving Children’s Self-Control-Without Losing Your Own*. New York, NY: Authors Guild.

Websites and Articles on Response Inhibition

LearningWorks For Kids (<http://www.learningworksforkids.com/EF/response.html>): The premier resource for executive function information, offering a detailed explanation of response inhibition, tips for parents, and activities to improve this skill.

Education.com (http://www.education.com/reference/article/Ref_About_Discipline/): This site offers examples and techniques for parents to use when helping their children to develop self-control.

Illinois Early Learning Project

(<http://illinoisearlylearning.org/tipsheets/impulsecontrol.htm>): This site provides tips for instilling impulse control in their children, as well as links to other informative sites on related topics.

National Association of School Psychologists

(<http://www.nasponline.org/resources/handouts/revisedPDFs/selfcontrol.pdf>): This handout describes important step-by-step strategies and skills for parents and teachers who are hoping to teach self-control skills to children.

Games and Activities That Can Practice Response Inhibition

- *Choose Your Own Adventure Books*
Encourage your child to read any books in the *Choose Your Own Adventure* series, which will allow him to recognize how each decision made can lead to a distinct consequence.
- *Playing board games (e.g. Trouble, Chutes and Ladder, Candyland)*
These board games, and ones similar to them, will allow your child to practice waiting for his turn patiently while other players count spaces or play out their own turns.
- *Dance Dance Revolution and Guitar Hero*
Both of these games enhance response inhibition in that the player must really concentrate and think about which note to play or square to step on in order to achieve success.
- *Simon Says*
The traditional game of Simon Says will allow your child to practice delaying an action until the appropriate cue is heard.
- *Freeze Tag*
Playing freeze tag with your child or having him play this game with friends or siblings will encourage the stop-and-start action of appropriate behaviors as well as the delaying of impulsive action.
- *Reading with a partner*
Read with your child, alternating turns, to allow for practice in waiting for one's turn and patience.