

CHAPTER 9 - SELF-REGULATION IN CONTEXT

The goal of *The Autistic Child's Guide to How to Behave* is to inspire people to embrace Behavioral Self-Regulation, Cognitive Self-Regulation and Emotional Self-Regulation as important foundation skills for children with ASC. The **spark*** (*Self-Regulation Program for Awareness and Resilience in Kids*) program provides a well-planned process for incrementally developing the child's conscious control of his body, thinking and emotions.

Self-regulation allows the child to take over conscious control of his executive functions. He can then plan, modify and direct his attention and reactions so they are healthy and appropriate to his age, his family and to the context. The child can deliberately inhibit undesired behavior, thoughts and emotions in situationally-appropriate ways. He discovers that he can monitor and adjust his thinking, feelings and actions. **spark*** helps children learn to take in relevant and complete information before deciding how to respond or react. By developing self-regulation skills, children become able to behave intentionally and thoughtfully. These skills are important for children with ASC as well as children with other developmental disabilities, like Fetal Alcohol Spectrum Disorder, Fragile X and Attention Deficit Hyperactivity Disorder.

Development of self-regulation typically occurs over at least the first two decades of life. During the preschool years, children move from being primarily driven by reflexes and biological needs to increased voluntary control of their behaviors and thoughts. Within

spark*, the child is prompted increasingly to plan, think ahead and to be less reliant on manipulation of concrete objects and directions from others. There are many refinements and developments that must occur in order for the child to become more independent. **spark*** has, however, formed a solid foundation for these further developments.

Difficulties with self-regulation do not explain all of the characteristics and behaviors of children with ASC. Nevertheless, hand flapping, talking repeatedly about the same topic and preoccupations frequently seen in children with ASC can be productively viewed as problems with regulating behavior, thoughts and attention. Inability to consistently and accurately monitor ongoing behaviors, poor working memory, inhibitory control and cognitive flexibility are all likely involved in behaviors characteristic of ASC. For example, rigid behaviors and thinking, unusual eating habits and sleep

Self-regulation is not an endpoint. It is a moving target that must be developed and refined through dynamic interactions with others.

patterns, self injury and extreme temper tantrums are seen in many children with ASC. **spark*** can help children, parents and educators deal with these behaviors by improving the child's understanding of important situational cues, increasing his ability to self-calm and enhancing his sense of self-control and autonomy.

Progression and implication of **spark* self-regulation skills**

spark* works progressively from imitation of easy actions through to self-direction and self-control of behavior, cognition and emotions. The major executive functions underlying self-regulation as well as selective, sustained and shifting attention are explicitly and deliberately highlighted and practiced. In the early stages of the program, the adult acts as the child's main regulator by teaching and modeling the skills. With practice, the child begins to recognize the usefulness of these skills and strategies and increasingly assumes control over them. Generalization of self-regulation skills is explicitly taught through the Awareness of Need, Resilience and Self-advocacy activities that focus on extending them in day-to-day settings.

This journey in promoting development of self-regulation begins with Behavioral Self-Regulation of simple hand movements, a type of action that is fairly readily established. Self-regulation of these actions is carefully and slowly advanced by systematically altering movement variations and reducing adult involvement and modeling. Once Behavioral Self-Regulation skills are established and extended into everyday life, they serve as a base for developing Cognitive Self-Regulation. Improved behavioral self-regulation also figures importantly in the child's development of Emotional Self-Regulation. With the child able to consciously control his body, he is ready to improve his ability to systematically review events going on around him and determine the most relevant information. He is then in a better position to detect and interpret social cues.

Areas of focus for **spark*** are specifically selected to reduce context-dependence and ensure that they can be used in a wide range of situations. This means that the same skills and strategies are more readily extended and transferred from unit to unit in **spark*** and from setting to setting. Figure 27 below shows the continuity of major skills and strategies introduced and extended over the **spark*** units.

Self-control of the child's hands, feet and body presented in the Behavioral Self-Regulation unit provides a base for refining his attention and increasing his use of systematic approaches in the Cognitive Self-Regulation unit. The child's new ability to determine the most important and relevant information can be extended into social settings. The child can learn to understand and use social gestures as well as maintain more situationally-appropriate activity levels.

Breath control, introduced in the Behavioral Self-Regulation unit, is revisited again and again as we focus on Cognitive and then Emotional Self-Regulation. Breathing is progressively refined so it can be used as Turtle Breathing to help the child calm and center himself.

Area of focus	Behavioral Self-Regulation	Cognitive Self-Regulation	Emotional Self-Regulation	Implications
Hands, feet and body control				<ul style="list-style-type: none"> • improved focused attention • more accurate and complete understanding of information • improved detection of signals, clues and models, social gestures • situationally-appropriate activity level
Turtle Breathing				<ul style="list-style-type: none"> • breathing to calm and center the body • mind and emotions • patience with self and others
Imitation, use of models				<ul style="list-style-type: none"> • learning from peers and other models in learning situations • learning from peers and other models in social situations
Visualizing				<ul style="list-style-type: none"> • improved construction of meaning • translation of visual information into verbal • self-calming
Construction of meaning and comprehension monitoring				<ul style="list-style-type: none"> • improved accuracy in detecting and interpreting social cues • better understanding conversation • increased ability to learn in group settings

Figure 1. Summary of skill and strategy progression across *spark units and implications.**

Imitation skills are central to learning self-regulation. From the beginning of *spark**, the child is taught to imitate adults as well as peers. Emphasis on using models to guide behavior is central to the child’s continued learning in educational and social settings. The child becomes increasingly aware that others are a resource for determining and evaluating his own behavior and performance.

Visualizing is introduced in the Cognitive Self-Regulation unit to help the child retain information and ensure construction of meaning. It is used again in the Emotional Self-Regulation unit to help the child visualize Happy Thoughts to assist him in calming himself and regaining equilibrium.

Construction of meaning and comprehension monitoring are another example of skills presented in **spark*** that have long-term implications to the child's continued ability to cope and learn in daily settings. His increased ability to build on and check the meaning of information he hears and sees significantly improves his ability to learn in natural settings and to enjoy social interactions. He can more readily detect and interpret social cues and follow and contribute to conversations. Learning in group settings, where children with ASC are often quite 'lost', will also be enhanced when the child uses these skills and strategies.

We can look further at the implications of learning these self-regulation skills by reviewing Marriage, Wolverton and Marriage (2009). They suggested that people with ASC failed to achieve higher levels of education, employment and independence because of problems planning and organizing their lives, difficulty dealing with social and sensory demands of day-to-day life and poor self-advocacy skills. The skills and strategies in the **spark*** program start children on the road to developing these skills. They learn to manage and direct their bodies, thinking and emotions more reliably and appropriately. The seeds of self-advocacy as well as self-resilience and autonomy are planted from an early stage.

Levine (2007) believes that, for children to be successful as adults, they need to develop improved and more accurate comprehension of information, better organizational skills and the ability to collaborate with others and develop self-insight. **spark*** helps children begin to develop these skills. They are helped to lean systematic and thorough intake of information as well as construction of meaning. The ability to use signals, clues, models and other information will serve the children well in learning to collaborate with others.

Identifying self-regulation

Self-regulated behavior is subtle: when it occurs, you often do not notice. An example of a typical scenario will illustrate this point. Recently, I was promoting the notion of 'ignoring' with some preschoolers. The flip-side and unstated alternative was "You don't have to clobber X, you can just ignore him." I noticed that the boy's younger sister was dolloping play foam onto his head. I watched carefully, ready to intercede as need be. The little boy continued with his play and did not even look at his little sister. She soon moved on to another activity. I commented, "Ben, you really did a good job there with your sister when she was trying to bug you." He replied calmly, "I was ignoring her." That is self-regulation. You have to notice what is missing – Ben did not yell or hit out at his sister.

When children start to exercise self-regulation, you may find yourself feeling a sense of relief. You may experience more peace and quiet. You may begin to 'put down your guard' and feel you do not have to be so hyper-alert. You may reach the end of your day and wonder why am I not exhausted? Ask yourself: "What was so much better today than yesterday?"

Stay alert to the child's use of self-regulation so you can highlight it and increase the likelihood that it will happen again. Some behaviors to watch for are included in Table 6 below. The behaviors in

the first column show that the child has an awareness of the usefulness and application of self-regulation. The second column describes examples of resilient behavior and positive attempts to cope. The third column provides instances of self-advocating by the child to maintain his position and equilibrium.

When you notice the child using self-regulation skills and strategies, highlight them. Praise him and let him know how he helped himself use his good thinking.

Table 1. Examples of self-regulated behavior showing awareness, resilience and self-advocacy.

Behaviors that suggest self-regulation		
Awareness	Resilience	Self-Advocacy
Initiating activities on his own	Controlling his attention	Trying new tasks with few hesitations
Planning his own tasks, activities and goals	Resisting distractions	Finding things he needs to accomplish something without adult help
Self-monitoring his progress on tasks	Persisting in the face of difficulties, distractions or disruptions	Sharing and taking turns independently
Making reasoned choices and decisions	Enjoying solving problems	Asking for help when needed
Cooperating with siblings and peers	Remaining calm when dealing with change, challenges and disappointments	Negotiating when and how to do things
Learning from what other people are doing	Bouncing back more readily after disappointments	
Attributing his achievements and failures to factors he can control such as effort		

Supporting self-regulation in everyday life

To exercise self-regulation, we need to ensure the child CAN. That is, he is Calm, Alert and Nourished. If he is tired, not feeling well or hungry, do not press for self-regulated behavior from him.

The emotional climate used around the child is also very important to his learning. When you interact with him, be positive, optimistic and confident. Optimal adult involvement carefully balances sincere warmth and respect with unwavering (and reasonably high) expectations.

To encourage family involvement, the **spark*** program includes a series of 18 newsletters to help parents understand the areas of focus and how they can promote the development of self-regulation at home and in the community. In order to make content and activities relevant to each family,

parents are asked to provide information on key areas of concern and need for self-regulation in their child.

Words we use shape and are reflective of our relationship with the child. Listen to yourself talk to him. What is he learning about learning? Is learning joyful and enjoyable to him? Is it joyful and enjoyable for you? Your words should act to help the child be more motivated and to learn more about himself. Everything you say must be sincere and honest but make sure you tell him about what he does well. We can all flourish with a little encouragement and the knowledge that others believe in our abilities. Your communication style lets the child know that you are there to support him but he needs to do as much as possible on his own and, next time, you will ask a little more.

Self-regulation can be taught and enhanced even to very young children. Some of the things that parents and teachers do naturally can enhance self-regulation skills. For example, action songs and rhymes are excellent media for practicing control of actions and thinking. Storybooks can provide 'safe' settings for experiencing a variety of emotions. As shown in **spark***, expensive equipment and specially-designed computer games are not necessary to foster the improvements in self-regulation skills.

Other ways to foster self-regulation skills everyday include:

1. **Give the child choices:** Invite the child to express his opinion about what he would like to do or how he would like to do it. Offer him alternatives and respect his choices. This gives him a greater sense of autonomy as well as validation of the importance of his input.
2. **Value his opinion:** Listen to the child's ideas and be responsive to his suggestions. Acknowledge his outlook even if you disagree. Explain your ideas in simple and honest terms.
3. **Explain your reasoning:** Calmly and matter-of-factly, give him reasons for doing things in certain ways or at certain times. Do not feel 'mean' if you have to remind him of a rule; state it as an objective fact. By doing this, he will be more willing and able to adopt the behavior.
4. **Use inclusive language:** Use of "We" and the notion of sharing thoughts, ideas and strategies can boost a child's sense that self-regulation is important for everyone. He will have a greater sense of intrinsic motivation and will not feel singled out.
5. **Praise and give feedback.** Praise the child for using self-regulation and explain why it is important. Do not feel that you have to give him a reward. Remember, tangible rewards can actually undermine his generalization of knowledge and learning (Deci and Ryan, 1985). Our goal is to help the child to use self-regulation skills for their own sake and not to get a prize.
6. **Give hints and encouragement:** By prompting the child with hints and encouragement, you support his thinking for himself and figuring out what might work. When we provide direct orders, he does not have an opportunity to reflect and use his

problem solving skills. After teaching the child a skill or strategy, begin asking him “What do you need to do?” or “What could you do to help yourself?” This reinforces his learning, extension and generalization of skills and strategies as well as his sense of autonomy.