The Cycle of Tantrums, Rage, and Meltdowns in Children and Youth with Asperger Syndrome, High-Functioning Autism, and Related Disabilities

Professor Brenda Smith Myles
University of Kansas, 11400 W. 155th Terrace, Overland Park, KS, USA 66221
bmyles@ku.edu

Anastasia Hubbard
University of Kansas, 7575 W. 106th Street, Apt #272, Overland Park, KS 66212 USA
anastasiahubbard@yahoo.com

Problems related to stress and anxiety are common in children and youth with Asperger syndrome (AS), high-functioning autism (HFA), and related disabilities. In fact, this combination has been shown to be one of the most frequently observed comorbid symptoms in these individuals (Ghaziuddin, Weidmar-Mikhail, & Ghaziuddin, 1998; Kim, Szatmari, Bryson, Streiner, & Wilson, 2000). Stress and anxiety in these children is often triggered or results from environmental stressors such as having to face challenging social situations with inadequate social awareness, social understanding, and social problem-solving skills; a sense of loss of control; difficulty in predicting outcomes of everyday events and behaviors; as well as an inherent emotional vulnerability; misperception of social events, and a rigidity in moral judgment that results from a very concrete sense of social justice violations (Church, Alisanski, & Amanullah, 2000; Kim et al., 2000). The stress and anxiety experienced by individuals with AS, HFA, and related disabilities may manifest as withdrawal, reliance on obsessions related to circumscribed interests or unhelpful rumination of thoughts, inattention and hyperactivity. It may also trigger aggressive or oppositional behavior, often described as tantrums, rage, and “meltdowns” (Myles, Trautman, & Schelvan, 2004).

Educators, mental health professionals, and parents often report that children with AS, HFA, and related disabilities appear to demonstrate aggressive or oppositional behavior with little or no prior warning. In reality, such behavior is one part of an escalating three-stage cycle to be described below. In addition to the suddenness with which such behaviors are reported to occur, it is important to note that many children and youth with AS, HFA, and related disabilities endure the entire cycle unaware that they are under stress. That is, while both overt negative behavior and withdrawal are apparent to their caregivers and teachers, depending on the child, students with AS, HFA, and related disabilities may not perceive themselves as being upset, angry, stressed, or anxious (Barnhill et al., 2000).

To help prevent and/or decrease the severity of behavioral problems, it is important that those who work and live with children and youth with AS, HFA, and
related disabilities understand the cycle of tantrums, rage, and meltdowns as well as interventions for each stage that promote self-calming, self-management, and self-awareness. This paper will address this information as well (a) interventions that help prevent tantrums, rages, and meltdowns by increasing social understanding and problem solving, facilitating sensory awareness, and fostering self-awareness and (b) implications for future research.

The Cycle of Tantrums, Rage, and Meltdowns

Tantrums, rage, and meltdowns (these terms will be used interchangeably) typically occur in three stages that can be of variable length. These stages are (a) the rumbling stage, (b) the rage stage, and (c) the recovery stage (Albert, 1989; Beck, 1987; Myles & Southwick, 2005).

The Rumbling Stage

The rumbling stage is the first stage of a meltdown. Here, children and youth with AS, HFA, and related disabilities exhibit specific behavioral changes that may appear to be minor and unrelated to an ensuing meltdown. For example, they may clear their throats, lower their voices, tense their muscles, tap their foot, or grimace. Some students engage in behaviors that are more obvious, including emotional or physical withdrawal, or verbally or physically challenging another child or adult.

To prevent these behaviors from escalating, it is imperative that an adult intervene without becoming part of a struggle. Interventions during this stage include: antiseptic bouncing, proximity control, signal interference, support from routine (Long, Morse, & Newman, 1976), just walk and don’t talk, redirecting, and home base. All of these strategies can be effective in stopping the cycle, and they are invaluable in that they can help the child regain control with minimal adult support (Myles & Southwick, 2005).

Antiseptic bouncing. Antiseptic bouncing involves removing a student, in a nonpunitive fashion, from the environment in which she is experiencing difficulty. At school, the child may be sent on an errand. At home, the child may be asked to retrieve an object for a parent in another part of the house. While engaging in these activities, the student has an opportunity to regain a sense of calm. Thus, when she returns, the problem has typically diminished in magnitude. Besides, the adult is on hand for support, if needed.

Proximity control. Rather than calling attention to behavior, using this strategy the teacher moves near the student who is engaged in rumbling behaviors. Similarly, parents using proximity control move near their child. Often something as simple as standing next to a child is calming. This can easily be accomplished without interrupting an ongoing activity. For example, the teacher who circulates through the classroom during a lesson uses proximity control.

Signal interference. When the child with AS, HFA, and related disabilities begins to exhibit a rumbling behavior, such as clearing his throat or pacing, the teacher can use a nonverbal signal to let the student know that he is under stress. For example, the
teacher can place herself in a position where eye contact with the student can be achieved, or an agreed-upon "secret" signal, such as tapping on a desk, may be used as to alert the child. Signal interference may be followed by an in-seat destressor, such as squeezing a stress ball, as recommended by an occupational therapist. In the home or community, the parents and the child may develop a similar signal (i.e., a slight hand movement) that the parents use when the child is in the rumbling stage. Often this strategy precedes antiseptic bouncing.

**Support from routine.** Displaying a chart or visual schedule of expectations and events can provide security to children and youth with AS, HFA, and related disabilities who typically need predictability or as advance preparation for a change in routine. This simple step can prevent anxiety and reduce the likelihood of tantrums, rage, and meltdowns. For example, the student who is signaling frustration by tapping his foot may be directed to his schedule to make him aware that after he completes two more problems he gets to work on a topic of special interest with a peer. Similarly, while running errands, parents can use support from routine by alerting the child in the rumbling stage that their next stop will be at a store the child enjoys.

**Just walk and don’t talk.** The adult using this technique merely walks with the student without talking. The adult’s silence is important because a child with AS, HFA, or related disabilities in the rumbling stage will likely react emotively to any adult statement, misinterpreting it or rephrasing it beyond recognition. On this walk the child can say whatever she wishes without fear of discipline or logical argument. In the meantime, the adult must be calm, show as little reaction as possible, and never be confrontational.

**Redirecting.** Redirecting involves helping the student to focus on something other than the task or activity that appears to be upsetting to her. When the source of the behavior is a lack of understanding, one type of redirection that often works well is telling the child that she and you can cartoon the situation in order to figure out what to do (see cartooning interpretative strategy). Sometimes, the student needs to cartoon immediately, at other times it can be briefly delayed.

**Home base.** A home base is a place in school or at home where an individual can escape stress. The home base should be quiet with few visual or activity distractions, and activities that occur within home base should be selected carefully to ensure that they are calming. In school, resource rooms or counselors’ offices may serve as a home base. The structure of the room supercedes its location. At home, the home base may be the child’s room or an isolated area in the house. Regardless of its location, it is essential that the home base be viewed as a positive environment. Home base is not timeout or an escape from classroom tasks or chores. The student takes class work to home base, and at home chores are completed after a brief respite in the home base (Myles & Simpson, 2002). Home base may be used at times other than during the rumbling stage. For example, at the beginning of the day the time spent in a home base can be used as a preventative measure to, preview the day’s schedule, introduce any changes coming up in the typical routine, ensure that the student’s materials are organized, or prime for specific subjects. At other times it can be used to help the student gain control after a meltdown (see recovery stage).
When selecting an intervention during the rumbling stage, it is important to know the student, as the wrong technique can escalate rather than de-escalate a behavior problem. For example, if a student’s behavior escalates when verbal information is provided an intervention such as signal interference (which does not require any talking) may be more appropriate to use than antiseptic bouncing (which does require talking). Further, while interventions at this stage do not take long to implement, it is advisable that adults understand the events that precipitate the target behaviors so that they can (a) be ready to intervene early or (b) teach children and youth strategies to maintain behavioral control during these times.

Interventions at this stage are merely palliative. They do not teach students to recognize their own frustration or provide a means of handling it. Techniques to accomplish these goals are discussed later in this article.

Rage Stage

If behavior is not diffused during the rumbling stage, the child or adolescent may move to the second stage, the rage stage. At this point, the student is disinhibited and acts impulsively, emotionally, and sometimes explosively. These behaviors may be externalized (i.e., screaming, biting, hitting, kicking, destroying property or self-injury) or internalized (i.e., withdrawal). Meltdowns are not purposeful, and once the rage stage begins, it most often must run its course.

During this stage, emphasis should be placed on child, peer, and adult safety as well as on protection of school, home, or personal property. The best way to cope with a meltdown is to get the child to home base, where he can regain self-control.

Of importance during the rage stage is helping the individual with AS, HFA, or related disabilities regain control and preserve dignity. To that end, adults should have developed plans for (a) obtaining assistance from educators such as a crisis teacher or principal, (b) removing other students from the area, or (c) providing therapeutic restraint, if necessary. Again, no teaching or other interventions can effectively take place during the rage stage.

Recovery Stage

Following a meltdown, many children with AS, HFA, and related disabilities have contrite feelings and often cannot remember what occurred during the rage stage. Some become sullen, withdraw, or deny that any inappropriate behavior occurred, others are so physically exhausted that they need to sleep.

It is imperative to implement interventions at a time when the student can accept them and in a manner the student can understand and accept them. Otherwise, the intervention may simply resume the cycle in a more accelerated pattern leading more quickly to the rage stage. During the recovery stage children are often not ready to learn. Thus, it is important that adults work with them to help them to once again become a part of the routine – whether at school or at home. This is often best accomplished by directing the youth to a highly motivating task that can be easily accomplished such as an activity related to a special interest.
Summary

Students with AS, HFA, and related disabilities experiencing stress and anxiety may react by having a tantrum, rage, or meltdown. While it may appear so at first, these behaviors do not occur in isolation or randomly; they are most often associated with a reason or cause. The student who engages in an inappropriate behavior is attempting to communicate his needs. Therefore, before selecting an intervention to be used during the rage cycle or to prevent the cycle from occurring, it is important to understand the function or role the target behavior plays.

Functional assessment provides a means of determining the conditions under which behaviors in the rage cycle occur and the specific function that the behavior may be serving to the student (Barnhill, 2005). It is a first step in developing effective interventions. Indeed, without determining reasons, causes, or conditions under which a behavior occurs, it is unlikely that an intervention will be effective.

Interventions That Help Prevent Tantrums, Rage, and Meltdowns

Children and youth with AS, HFA, and related disabilities generally do not want to engage in tantrums, rage, and meltdowns. Rather, the rage cycle is the only way they know of expressing stress, and coping with problems and a host of other emotions to which they see no other solution. Most want to learn methods to manage their behavior, including calming themselves in the face of problems and increasing self-awareness of their emotions.

The best intervention is prevention. Prevention occurs best as a multifaceted approach consisting of instruction in (a) strategies that increase social understanding and problem solving, (b) techniques that facilitate sensory awareness, and (c) methods of self-awareness.

Strategies That Increase Social Understanding and Problem Solving

Social skills such as social understanding and problem solving help people function more effectively in their daily lives. They enable them to interact appropriately with others, which is not only beneficial socially, but is also essential in environments such as school and work. Students with AS, HFA, and related disabilities typically experience significant challenges with social skills, and as such interventions must be implemented to help strengthen them.

Enhancement of social understanding includes providing direct assistance (see also Attwood, this issue). It is almost impossible to teach all the social skills that are needed in everyday life. Therefore, these skills are often taught in an interpretive manner after the student has engaged in an unsuccessful or otherwise problematic encounter. That is, interpretation skills are used recognizing that, no matter how well developed the person’s social skills are, situations will arise that he or she does not understand. As a result, someone in the person’s environment must serve as a social management interpreter. As illustrated in this section, interpretative strategies can help turn seemingly random actions into meaningful interactions for individuals with AS, HFA, and related disabilities. Such strategies include (a) cartooning; (b) social autopsies; (c) the
Cartooning. Visual symbols such as cartooning have been found to enhance the processing abilities of persons on the autism spectrum and their understanding of the environment, as well as to reduce tantrums, rage, and meltdowns (Hagiwara & Myles, 1999; Kuttler, Myles, & Carlson, 1998; Rogers & Myles, 2001). One type of visual support is cartooning. Used as a generic term, this technique has been implemented by speech/language pathologists for many years to enhance understanding in their clients. Cartoon figures play an integral role in several intervention techniques: pragmatism (Arwood & Brown, 1999), mind-reading (Howlin, Baron-Cohen, & Hadwin, 1999), and Comic Strip Conversations TM (Gray, 1995). According to Attwood (1998), cartooning techniques, such as Comic Strip Conversations TM, allow the child to analyze and understand the range of messages and meanings that are a natural part of conversation and play. Many children with Asperger’s Syndrome are confused and upset by teasing or sarcasm. The speech and thought bubble as well as choice of colors can illustrate the hidden messages. (p. 72)

Social autopsies. This innovative strategy was developed by Lavoie (cited in Bieber, 1994) to help students with social problems understand their social mistakes. Simply stated, the social autopsy is a vehicle for analyzing a social skills problem. Specifically, following a social error, the student works with an adult to (a) identify the error, (b) determine who was harmed by the error, (c) decide how to correct the error, and (d) develop a plan to prevent the error from occurring again. A social skills autopsy is not a punishment. Rather, it is a supportive and constructive problem-solving strategy. According to Lavoie (cited in Bieber, 1994), the success of the strategy lies in its consistent structure of practice, immediate feedback, and positive reinforcement. Every adult with whom the student with AS, HFA, or related disabilities has regular contact, such as parents, teachers, and therapists, should know how to do a social skills autopsy fostering skill acquisition and generalization.

Situation, options, consequences, choices, strategies, simulation (SOCCSS). The SOCCSS strategy was designed to help students with social disabilities, including those with AS, understand social situations and develop problem-solving skills by putting behavioral and social issues into a sequential format (Roosa, 1995). This adult-directed strategy helps children and youth understand cause and effect and realize that they can influence the outcome of many situations by the decisions they make. The strategy can be used one-on-one with a child or as a group activity, depending on the situation and students’ needs.

SOCCSS consists of the following six steps.

- **Situation**: After a social problem occurs, the adult helps the child or youth to identify the who, what, when, where, and why associated with it. The goal is to encourage the child with AS, HFA or related disabilities to identify and review these variables. However, at first the adult assumes an active role in prompting and, when necessary, identifying answers to these questions.
• **Options**: The adult and student brainstorm several behavioral options the student might have chosen in the given situation. Brainstorming means accepting and recording all child responses without evaluating them. Initially, the adult usually has to encourage the youth with AS, HFA, or related disabilities to identify more than one option that could have been done or said differently.

• **Consequences**: For each behavior option generated, a consequence is now listed. The adult asks the student, “So what would happen if you ... *(name the option)*?” Some options may have more than one consequence. It is often challenging for students with AS, HFA, and related disabilities to generate consequences because of their difficulty determining cause-and-effect relationships. Role-play can serve as a prompt in identifying consequences.

• **Choices**: The options and consequences generated in the previous step are prioritized using a numerical sequence or a yes/no response. Following prioritization, the student is prompted to select the option that (a) appears doable and (b) will most likely help the student obtain personal wants or needs.

• **Strategies**: A plan is developed to carry out the option if the situation occurs. Although the adult and child collaborate on the stages of the plan, the student should ultimately generate the plan to ensure a feeling of student ownership and commitment to use the strategy.

• **Simulation**: Roosa has defined this practice in a variety of ways: (a) using imagery, (b) talking with another about the plan, (c) writing down the plan, or (d) role-playing. The student evaluates his personal impressions of the simulation. Did the simulation activity provide the skills and confidence to carry out the plan? If the answer is “no,” additional simulation must take place.

Although designed as interpretive, this strategy may also be used as an instructional strategy. For example, teachers can identify problems students are likely to encounter and address them using SOCCSS so that students have a plan prior to a situation occurring (Myles & Simpson, 2001).

*Stop, observe, deliberate, and act (SODA).* Created by Bock (2001) to serve as a social behavioral learning strategy, SODA helps children and youth with AS, HFA, and related disabilities “attend to relevant social cues, process these cues, ponder their relevance and meaning, and select an appropriate response during novel social interactions” (p. 273). Similar to social autopsies and SOCCSS, SODA is a visual strategy that has broad application. The strategy, which utilizes the *think aloud, think along* model (Andrews & Mason, 1991), contains the following steps:

• **Stop**: This step prompts the child to develop an organizational schema in which an interaction is to occur. Specifically, the child with AS, HFA, or related disabilities attempts to define the activities and their order as well as to identify a location near the activities from which he can observe the scene in order to obtain additional information that will help him successfully participate in the activity.

• **Observe**: Aspects of the environment targeted for observation may include length of conversations, number of individuals involved in conversations, tone
of conversations (i.e., formal, casual), strategies utilized to begin and end conversations, nonverbal language, and any routines that may be in place.

- **Deliberate**: In this phase, the child with AS, HFA, or related disabilities develops an action plan to use in the new environment. This includes deciding on a topic of conversation, identifying strategies that may lead to successful interactions (i.e., appropriately beginning a conversation, using eye contact, maintaining appropriate social distance), and analyzing how the child thinks he will be perceived by others if he does or does not follow the routine he has identified.

- **Act**: At this point, the child becomes an active participant in the novel environment carrying out the strategies he identified in the deliberation phase. This stage serves as a platform for generalizing skills that were learned in another (e.g., therapeutic) environment.

Shown to be effective with adolescents with AS (Bock, 2002), SODA is not self-contained but relies on using social skills developed through direct instruction or coaching formats in group or individual settings. SODA’s importance lies in the fact that it allows students to approach novel situations without impulsivity and to use social skills in a context that is appropriate.

### Techniques That Facilitate Sensory Awareness

All the information we receive from the environment comes through our sensory systems. Thus, our visual, auditory, proprioceptive, vestibular, olfactory, and gustatory systems impact learning (Dunn, 1999). Many individuals with AS, HFA, and related disabilities have sensory problems and, therefore, require direct assistance in this area (Dunn, Myles, & Orr, 2002; Myles et al., 2004). Several programs, including those mentioned below, appear effective in meeting the sensory needs of children and youth with AS, HFA, and related disabilities.

- **How Does Your Engine Run: The Alert Program for Self Regulation** helps individuals recognize their sensory needs, particularly as they relate to arousal or awareness. This self-empowering program teaches children and youth to change their level of alertness in response to academic or social demands (Williams & Shellenberger, 1996).

- **The Tool Chest for Teachers, Parents, and Students** emphasizes behavior as a means of communication and helps adult users to develop sensory strategies that prevent behavior problems. Two videotapes supplement the program by demonstrating important strategies (Henry Occupational Therapy Service, Inc., 1998).

- **Asperger Syndrome and Sensory Issues: Practical Solutions for Making Sense of the World** is the only book that specifically addresses the sensory problems experienced by individuals with AS. The book overviews the impact of sensory integration dysfunction on the academic, social, and behavior domains. In addition, it contains instruments to assess social issues and discusses strategies for addressing these concerns for effective social and academic functioning (Myles, Cook, Miller, Rinner, & Robbins, 2000).

### Methods of Self-Awareness
Persons with AS, HFA, and related disabilities demonstrate varying degrees of ability to understand their own feelings (Barnhill, 2001; Barnhill et al., 2000). Consequently, they need strategies that will help them understand their emotions and react in an appropriate manner to them. McAfee (2002) has developed a visually based curriculum designed to assist students in decreasing stress by learning the following:

- To identify and label their emotions using nonverbal and situational cues
- To assign appropriate values to different degrees of emotion, such as anger and sadness
- To redirect negative thoughts to positive thoughts
- To identify environmental stressors and common reactions to them
- To recognize the early signs of stress
- To select relaxation techniques that match student needs.

Buron and Curtis (2003) created the Incredible 5-Point Scale to help individuals with AS, HFA, and related disabilities understand themselves. The scale is unique in that it can be used as an obsessional index, a stress scale, a meltdown monitor, etc. Working with an adult, children and youth with AS, HFA, and related disabilities identify their behaviors along a numerical scale from 1 to 5. They are then taught to recognize the stages of their specific behavioral challenges and methods to self-calm at each level.

**Future Directions**

Many of the strategies outlined above have not been using rigorous research methodology. Thus, reports of their effectiveness comes primarily from practitioners. Because there is a dearth of empirically valid evidence regarding the effectiveness of social cognitive interventions for individuals with AS, HFA, and related disabilities research evaluating specific procedures and protocols, manualization of procedures and protocols, etc., is necessary, very much like research on anxiety and stress management in other conditions. To accomplish this goal, several different lines of research and therapy must be integrated, such as cognitive behavior therapy, functional assessment procedures and social and communication skills training.

**Summary**

Many children and youth with AS, HFA, and related disabilities exhibit anxiety that may lead to challenging behaviors. Such stress and subsequent behaviors should be viewed as an integral part of the disorder (Klin & Volkmar, 2000). Thus, it is important to understand the cycle of behaviors to prevent seemingly minor events from escalating. In addition, the function of the behavior must be understood and the student must be provided instruction and support in using (a) strategies that increase social understanding and problem solving, (b) techniques that facilitate sensory awareness and (c) methods of self-awareness.

Because little research exists on the cycle of behaviors exhibited by students with AS, HFA, and related disabilities and interventions for each stage, a systematic program of research is required to identify (a) which techniques are most appropriate, (b) the context in which they can be used, and (c) methods to ensure that individuals with AS, HFA, and related disabilities generalize these skills to home, school, and community.
References


In the case of children, tantrums or rage attacks often take place either just at school, where stresses are greatest, or just at home, where the child can let it all out. The fact that the child is good-natured most of the time makes such outbursts all the more bewildering. The child can seem to be a Jekyll and Hyde. Coping with stress, confusion, and frustration is an enormous challenge for individuals with Asperger's. One way their supporters can help is by noting the patterns or total stress load around meltdowns and intervening before a blow-up. Those with Asperger's may not be able to self-monitor well enough to know they are building up to an explosion. For example, students with Asperger's may not always know that they are near a stage of crisis. Asperger syndrome is a form of autism. People with Asperger syndrome may find difficulty in social relationships and in communicating. In particular, understanding and relating to other people, and taking part in everyday family, school, work and social life, can be harder. Other people appear to know, intuitively, how to communicate and interact with each other, yet can also struggle to build rapport with people with Asperger syndrome. People with Asperger syndrome may wonder why they are 'different' and feel their social differences mean people don't understand them. It is often diagnosed later in children than autism and sometimes difficulties may not be recognised and diagnosed until adulthood. The benefits of a diagnosis. Not limited to young children: Autistic meltdowns are not limited to young children on the spectrum. Tweens, teens, and even adults with autism may have meltdowns and, surprisingly, they may occur even among individuals with high functioning forms of autism. Preceded by signs of distress: Autistic meltdowns generally begin with warning signals called "rumblings." Rumblings are outward signs of distress that can be quite obvious or somewhat subtle. Rumblings might start with a verbal plea to "go now," or visually obvious signs of distress such as hands over the ears.