



Science Behind the Story (SBS)
I Want It Now!!! (🌈 An Emotional Health Story)
(3rd Grade- 8-9yrs)

This story talks about learning how to control impulsive behaviors that are triggered by extreme emotions.

- 🌈 A temper tantrum is an example of an impulsive behavior that is often caused when someone cannot control their behavioral response to an emotional situation.

Temper tantrums in babies and toddlers typically occur because the child cannot adequately communicate their wants and needs (Colson, 1997). Early in life, the cognitive development of a child is basically egocentric (Babakr, 2019) and they cannot understand when they do not get something that they want. By the time children are in 3rd grade, their cognitive development has progressed so that they understand that they cannot always get everything that they want when they want it (Babakr, 2019). However, when emotions are exaggerated, children tend to act impulsively because they are not thinking clearly (Herman, 2018). Emotions can also be exaggerated when children are tired or hungry, so getting enough sleep and food is also important for being able to control impulsive behaviors (Lundahl, 2015).

- 🌈 The part of the brain that controls your impulses does not fully develop until late adolescence. This is why children often exhibit behaviors that are out of control; they have not learned to control their emotional responses.

The prefrontal cortex, in particular the dorsolateral prefrontal cortex, is a region of the brain that plays a role in our impulse control (Bekhara, 2005; Bolton, 2017). It is well known, that this is an area of our brain which is maturing well into late adolescence (Gogtay, 2004). Because of the variability in brain development, this maturation can occur into early adulthood (Gogtay, 2004). This part of the brain takes so long to grow and develop because it needs information about the world the person lives in to be able to help the person make good decisions (Casey, 2019). In children, this part of the brain is definitely still maturing and so this can contribute to the impulse control issues seen in response to emotional situations (Casey, 2019).

- 🌈 Being able to identify and control your emotional responses, especially when your brain is not adequately developed to do so, will help you to limit irrational and socially unacceptable behaviors. These strategies will also help you to keep your brain healthy.

When a child's emotions are exaggerated, chemicals are released by the emotional parts of the brain which then affect the activity of prefrontal cortical areas to adequately control impulsive behaviors and behaviors such as temper tantrums can result (Casey, 2019; Panksapp, 1986). If children are having temper tantrums, either at school or at home, then they need help in understanding and identifying what is causing the impulsive behaviors (Daniels, 2012). In a lot of cases, the help of someone from the child's support system – parent, caretakers, teachers, etc. – can help (Bostic, 2021; Garner, 2010). Identifying emotions – especially when they are exaggerated – and then considering the consequences of their actions are two very important ways to help control impulsive behaviors (Bostic, 2021; Garner, 2010). As we know, everyone is different and strategies for handling impulsive behaviors may be different for different

children. Plus, a strategy that works in some situations, may not work in all situations. Allowing the child to help in figuring out what works for them will help them develop good strategies for controlling their impulses throughout their life.

National Standards:

Next Generation Science Standards

- Crosscutting Concepts:
 - **Cause & Effect:** Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by which they are mediated, is a major activity of science and engineering.
 - Cause and effect relationships are routinely identified, tested, and use to explain change.
 - Events that occur together with regularity might or might not be a cause & effect relationship.
 - **Structure & Function:** The way an object is shaped or structured determines many of its properties and functions.
 - Different materials have different substructures; which can sometimes be observed.
 - Substructures have shapes and parts that serve functions.
 - **Patterns:** Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.
 - Patterns of change can be use to make predictions.
 - Patterns can be used as evidence to support an explanation.
- Related Grade Level Content
 - Changes in environment leads to adaption by organisms.

ASCA (American School Counselors Association):

Personal/Social Development

- **Standard A:** Students will acquire the knowledge, attitudes and interpersonal skills to help them understand and respect self and others.
 - PS:A1 Acquire Self-knowledge
 - PS:A1.5 Identify and express feelings
 - PS:A1.6 Distinguish between appropriate and inappropriate behavior.
 - PS:A1.8 Understand the need for self-control and how to practice it.
 - PS:A2 Acquire Interpersonal Skills
 - PS:A2.6 Use effective communications skills
 - PS:A2.7 Know that communication involves speaking, listening and nonverbal behavior
- **Standard B:** Students will make decisions, set goals and take necessary action to achieve goals.
 - PS:B1 Self-knowledge Application
 - PS:B1.1 Use a decision-making and problem-solving model
 - PS:B1.2 Understand consequences of decisions and choices
 - PS:B1.3 Identify alternative solutions to a problem
 - PS:B1.4 Develop effective coping skills for dealing with problems

National Health Education Standards (Shape America) & CDC (Centers for Disease Control and Prevention)

- **Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.
 - 1.5.1: Describe the relationship between healthy behaviors and personal health. **(CDC)**
 - 1.5.2: Identify examples of emotional, intellectual, physical, and social health. **(CDC)**
 - 1.5.4: Describe ways to prevent common childhood injuries and health problems. **(CDC)**

- **Standard 2:** Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
 - 2.5.1: Describe how family influences personal health practices and behaviors. **(CDC)**
 - 2.5.3: Identify how peers can influence healthy and unhealthy behaviors. **(CDC)**
 - 2.5.4: Describe how the school and community can support personal health practices and behaviors. **(CDC)**
- **Standard 4:** Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
 - 4.5.1-Demonstrate effective verbal and nonverbal communication skills to enhance health. **(CDC)**
 - 4.5.4- Demonstrate how to ask for assistance to enhance personal health. **(CDC)**
- **Standard 5:** Students will demonstrate the ability to use decision-making skills to enhance health.
 - 5.5.1: Identify health-related situations that might require a thoughtful decision. **(CDC)**
 - 5.5.3: List healthy options to health-related issues or problems. **(CDC)**
 - 5.5.5: Choose a healthy option when making a decision. **(CDC)**
 - 5.5.6: Describe the outcomes of a health-related decision. **(CDC)**
- **Standard 7:** Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
 - 7.5.1: Identify responsible personal health behaviors. **(CDC)**
 - 7.5.2: Demonstrate a variety of healthy practices and behaviors to maintain or improve personal health. **(CDC)**
 - 7.5.3: Demonstrate a variety of behaviors to avoid or reduce health risks. **(CDC)**

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