



SJSU Pediatrics Clinic: Newsletter!

Dates to Remember:

Nov. 15th - Parent Education Day
 Nov. 24th - Holiday: Clinic closed
 Dec. 6th - Last day of Clinic

Power of Play

Play is a supportive activity for human development as it builds upon aspects of cognitive, imaginative, physical, psychosocial, and sensorimotor abilities. While play is often associated with childhood, it is important to note that play should occur throughout the lifespan.



As children develop, they naturally engage in more complex play. Each stage of play helps a child explore new roles and develop new types of social skills for interacting with others. Have you heard your child's therapist talk about one of these stages?

Solitary Play - Develops around 12 months, when a child plays alone, even around other children. This stage helps children explore the relationship between their body and the environment through new sensory experiences (touching, tasting, grabbing objects, etc.).

Parallel Play - By 2-3 years, children enjoy playing next to peers

engaged in the same activity, even if they do not directly interact. In this stage, the child begins to see himself or herself as part of a social group.

Associative Play - Children engage in this play around age 3. Although children may not yet work together, they develop interest to interact with others, as seen by watching and imitating people around them.

Cooperative Play - This is the most advanced stage, developing at 4-5 years when children begin school. With cooperative play, children will work together toward one goal, such as building a single structure or dramatic play story. Children can begin to form friendships through this form of play.

Play and learning are intertwined. It is through play, that children learn and develop the skills necessary for life.

Constructive play, such as building with blocks or making three-dimensional crafts, fosters fine motor skills, spatial awareness, coordination, and cognitive skills such as problem solving.



Play with others allows children to develop their social interaction skills, such as understanding social roles and rules and developing empathy.



Physical play activities such as climbing a play structure, digging in a sandbox, going on swings and seesaws, and playing tag, allow a child to develop coordination and other gross motor skills, as well as body and spatial awareness.

Engagement in all of these play activities expose them to varied sensory experiences that their bodies and minds need for development of motor skills and emotional regulation.

Sensory Integration

Sensory integration is a term used to describe the brain's processing of input from one's senses¹. This is very important because integration of these sensations forms the base for academic learning.

Generally, people are able to receive feedback about the environment through their senses and respond appropriately to information such as sound, visual information, and touch. This feedback helps us make decisions about how to move, how to make sense of a situation, and how to act at any time. Most of the time, our



brain works without problems to organize sensory information so that we act appropriately for our given situations.

For some people, certain sensory information can be either very **overwhelming** (e.g. unable to focus on a spelling test due to buzzing from an overhead classroom light) or **underwhelming** (e.g. not noticing when face is messy).

Over Responsive	Under Responsive
Dislikes certain textures	Constantly seeking touch
Dislikes baths	Does not notice when face is messy
Particular about types of clothes	Mouths everything, edible or not
Does not like to be messy	Decreased pain sensation
Limited food preferences	

Sensory integration is important in the development of normal play². Sensory integration problems can be addressed in occupational therapy.

Sensory integration techniques help children with these sorts of processing difficulties better organize incoming information so that they can participate more actively in activities they enjoy.



Applying Sensory Integration Principles at Home

Every activity has the potential to be calming or alerting for your child. Movement activities that are fast with quick changes are alerting whereas slow rhythmic movement activities are calming. For example, slowly swaying on a swing or hammock would be calming, but rapidly swinging back and forth or spinning on the swing would be alerting.



Providing firm touch and deep pressure is calming and helps with self regulation. After a bath, the simple activity of drying off your child with slow firm strokes may calm your child, preparing them for bed. Light touch on the other hand is alerting and can even be unpleasant and agitating for children with sensory sensitivities. For instance, some individuals do not enjoy brushing their teeth or standing in line for this reason. One way you can help is to have the child be in the back of the line so there is less chance of being lightly touched by others. Having your child engage in heavy work such as opening doors, pushing a shopping cart, and carrying groceries or any items for chores, will also provide your child with sensory input that will help them feel more calm and organized³.



Zones of Regulation

Even when we are not aware of it, adults and children alike work on self-regulation. The *Zones of Regulation*⁴ is a system that helps students categorize, understand, and express complex feelings they experience.



To help students understand emotional states, the *Zones* categorizes states of alertness and emotions into four colored zones:

The Blue Zone describes low states of alertness, such as when one feels sad, tired, sick, or bored. This is when one's body and/or brain is moving slowly or sluggishly.

The Green Zone describes a regulated state of alertness. A person may be calm, happy, focused, or content. This is the zone students need to be in for schoolwork and socializing. Being in the Green Zone shows control.

The Yellow Zone describes a heightened state of alertness. A person may experience stress, frustration, anxiety, excitement, silliness, confusion, and many more slightly elevated emotions (such as wiggly, squirmy, or sensory seeking). In the Yellow Zone, one starts to lose control of their emotions or body.

The Red Zone describes an extremely heightened state of alertness or very intense feelings. A person may experience anger,



explosive behavior, panic, terror, or elation when in the Red Zone. In the Red Zone one is out of control of one's body.



Emotional regulation depends on three things to function: sensory integration, executive function (how we make decisions, plan and use information) and emotional regulation (how we manage emotions). The *Zones* program provides students with strategies or tools for each of these areas to help them regulate their emotions.

Developmental Milestones

1-2 years - Stands independently, walks up and down stairs with assistance, walking, talking (up to 20 words), knows general body parts



2-3 years - Tracing plus signs and squares, beginning tripod pencil grasp, uses 250 words, jumps, understands two-step command, takes turns, able to walk up and down steps, dresses and undresses self with minimal assistance, can hold a pencil

3-4 years - Cutting on lines, coloring within lines, manipulation of paper with assisting hand

4-5 years - Throw balls at targets, copying simple words, cutting squares, identifies colors, hops, skips

5-6 years - catching balls, kicking balls, established dominant hand, mature scissor grasp, dynamic tripod-grasp, prints name, ties shoelaces⁵



For more information on developmental milestones, parents can visit this website:

www.howkidsdevelop.com

Academic References

1. Ayres, A. J. (2005). *Sensory integration and the child: 25th anniversary edition*. Los Angeles: Western Psychological Services.
2. Parham, L. D. & Fazio, L. S. (2008). *Play in occupational therapy for children*. St. Louis, MO: Mosby Elsevier.
3. Dunn, W. (2014). *Sensory Profile 2: User's Manual*. Psych Corporation.
4. Kuypers, L. M. (2011). *The zones of regulation: A curriculum designed to foster self-regulation and emotional control*. San Jose, CA: Think Social Publishing, Inc.
5. Schultz-Krohn, W. (2016). *Occupational therapy with children*. San Jose: San Jose State University Associated Students Print Shop.