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Nervous System Regulating Activities for Children

Building Regulatory Capacity Through Development

Early-life experiences that include supportive multisensory input and attuned relationships are necessary and formative to brain development, as children learn to self-regulate through the experience of co-regulation with others. Play is also essential to the developmental process for all children; engaging in playful activities with children creates the prime conditions for building regulatory capacities later in life.

It is best to introduce and practice these activities with your child before starting the Safe and Sound Protocol (SSP) or Integrated Listening System (ILS) programs, so they are safe and familiar. In addition to any of the applicable activities in the *Nervous System Regulating Activities* eBook, use these recommendations to help build regulatory capacity in children.

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GENERAL STRATEGIES



Play

When delivering to children, create opportunities for playful engagement between you and the child, or between the child and their caregiver(s).

In some cases, you may need to model play and support both the child and caregiver with co-regulation, so that they can all experience the regulating benefits.

Blocks
(DUPLO®, LEGO®, Jenga, Magna-Tiles)

- Provide access to the blocks in an environment that allows for movement, ideally on the floor.
- Let the child explore the blocks.
- Model different types of activities, like stacking, sorting or arranging blocks.
- Stay responsive to the child's cues and engage in opportunities for shared play.

Rationale
Block play allows children to explore the materials' and environment's physical and social qualities, building essential functional skills.[1]

Pretend/Imaginative Play

- Provide access to toys that allow children to assume qualities, create scenarios and enact stories (e.g. cars, character figures, stuffed animals, dolls, pretend food).
- Stay responsive to the child's cues and engage in opportunities for shared play.

Rationale
Pretend play helps children develop foundational social-emotional skills, creativity and expressivity.[2]

Free Play

- Provide access to a variety of toys, materials and environmental objects.
- Allow the child to self-select preferred activities.
- Observe the child's selection, looking for preference, style of play and preferred body position.
- Stay responsive to the child's cues and engage in opportunities for shared play.

Rationale
Unstructured, quiet and active play are predictive of regulatory capacity in later years. When paired with harmonious and safe relationships, play contributes to the development of prosocial behaviors, like communication and collaboration, and leads to development of language, executive functions and other cognitive skills.[3,4]



Sensory

Sensory processing refers to how we take in information through our sensory systems. Most sensory activities include stimuli from multiple sensory systems, and should be individualized for each child based on their needs and preferences. Remember that sensory strategies that are regulating (supportive) for some may be dysregulating (unsupportive) for others. A sensory-informed evaluation will help guide activity selection.

Here are a few sensory activities you may explore with your client. Please review the Sensory Considerations guide in MyUnyte and revisit the Sensory Considerations module in your Foundational SSP Training for further recommendations.

Sensory Bin

- Sensory bins are containers with multisensory objects. They may include a variety of manipulatives, like Play-Doh, fidget toys or Wikki Stix, or items with different textures, like cotton balls, water beads, rice, paper clips or small figurines.
- Sensory bins can be customized based on developmental needs and preferences, and can be economically designed using familiar household materials.
- Allow the child to freely explore the sensory bin.

Steam Roll

- Provide deep pressure by rolling or pressing an exercise ball or foam cylinder over the child's extremities.
- Get permission; start slowly and gently, and increase the intensity and duration according to the child's comfort.
- Time and pace the pressure so it is provided in synchrony with the child's exhale and in a rhythmic, predictable manner.
- Stay responsive to the child's cues throughout.

Rationale

Sensory strategies have been found to help improve sensorimotor skills and motor planning; socialization, attention and behavioral regulation; reading-related skills; participation in active play; and achievement of individualized goals.[5]

Swinging

- Help reduce stress by stimulating the vestibular system with some light rocking.
- Consider using everyday equipment, such as rocking chairs, playground swings or hammocks, or sensory equipment in a clinic or gym.
- Start slowly and gently, and increase the speed and duration to the child's tolerance.
- Alternatives include bouncing up and down on an exercise ball or holding and swaying the child.

Rationale

When paired with music, rhythmic movement has been found to improve self-regulation and executive function. Vestibular stimulation through swinging has been found to reduce stress, as measured by decreases in blood pressure, respiratory rate and improved sleep quality.[6,7]



Creative Arts

Creativity is an expression of the social engagement system.

Use creative arts, like drawing, painting or other mediums, to provide children with a right-brain modality to support hemispheric integration and autonomic regulation.

Finger Painting
(Shaving Cream/Whipped Cream, Paint or Sand)

- Seated at a desk or table, provide dollops of shaving cream or access to similar materials.
- Allow the child to freely explore the material. For those who are reluctant to touch and/or get hands messy, you may consider sealing the “paint” in a large Ziploc bag.
- You may encourage the child to spread the shaving cream to create a canvas, finger-painting in the shaving cream.

Free Drawing

- Provide access to drawing or coloring materials (e.g. crayons, markers, dry-erase markers).
- Assist the child in finding a comfortable position and appropriate surface.
- If developmentally appropriate, ask them to describe or title their work.

Partner Drawing

- Provide access to drawing or coloring materials (e.g. crayons, markers, dry-erase markers).
- Sitting with the child, encourage them to start drawing a picture, such as the head of a monster.
- Take turns drawing one additional element to the picture (e.g. the child draws the arms, you draw the legs, and. so on)
- Once complete, prompt the child to give the picture a name or create a story about it.

Rationale
Drawing can be an effective strategy for self-regulation in children, alongside helping to identify and express emotions.[8]



Movement

Coordinated movement is a voluntary bodily function informed by sensory information and quality communication between the brain and body.

Use structured and unstructured movement activities to reinforce brain-body connection and regulation.

Nature Walk

- Identify a natural area with enough space to wander.
- Walk with the child through nature, allowing the child to freely explore the environment.

Rationale

Nature walks can improve mental health symptoms, such as reducing anxiety and depression. A reduction in stress is also observed in group participation and is shown to positively affect regulation in children.[9,10,11]

Yoga

- Try these child-friendly yoga poses.
- Provide access to an open space that allows for movement (a yoga mat is optional).
- Guide the child through yoga poses, encouraging them to breathe throughout.
- If developmentally appropriate, encourage the child to pair animal sounds or expressions with the pose (e.g. “Can you hiss your breath like a snake?”).



Mountain Pose: Stand tall like a mountain.



Dog Pose: With your “paws” on the ground, bow your head between your arms like a puppy.



Cat and Cow Pose: On hands and knees, curl your spine like a cat, then drop your belly and arch your back, looking forward like a cow.



Snake Pose: Lying on your belly with your hands on the ground, push your chest up and hiss like a snake.



Frog Pose: Squat on the ground with your knees and ankles bent like a frog. Turn your head side to side and stick out your tongue to catch a fly.

Rationale

Yoga has a demonstrated ability to reduce anxiety and can help support autonomic regulation.[12]



Breathing

Help the child feel grounded with deep, slow breaths, using games to make it fun and playful. Encourage the child to feel the movement in their belly, chest and face.

Breathing Games

- Practice breathing out, like blowing out a candle with pursed lips.
- Blow soap bubbles through a straw to create a “bubble mountain.”
- Blow soap bubbles with pursed lips, taking turns blowing and popping.
- Practice “bumble bee” or ”hummingbird” breaths by humming with closed lips while breathing out.

Rationale

Diaphragmatic and slow breathing has demonstrated positive effects on attention, affect and autonomic regulation, including in child populations.[13,14]



General Strategies to Enhance Co-regulation and Safety During Activity

- Sitting on lap or being held by a caregiver during activity.
- Use a calm, relaxed vocal tone, delivered at a moderate speed.
- Use trauma-sensitive touch to demonstrate social engagement (e.g. high-fives).
- Enhance facial expressions to show curiosity, joy and encouragement.
- Use eye contact and body position, or limit both based on the child’s needs, to create safety and connection.
- Remember that a child’s ability to engage may fluctuate throughout and between listening sessions. Stay present and engaged, even if it appears the child is not.
- Look for opportunities to model, take turns, or offer items that will support the child’s ideas as they explore and complete activities.
- Attune to the child’s autonomic state through the activity, and modify both program delivery and activity participation accordingly.

Reference

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