

Sensory-Based Interventions in School Occupational Therapy

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SBI (Sensory-Based Interventions)

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Not on handouts

- SBI are the guided use of sensory strategies to improve school behavior by addressing specific sensory modulation and sensory discrimination challenges (Watling et al., 2011)
- SBIs used in research proven school PBIS, Greenspan Floortime for ASD, Collaborative Problem Solving Approach for ODD, & DBT (Dialectic Behavior Therapy) for chronic self-cutting
- SBIs can help reduce student's Aggression & Self-stimulation behaviors (Murray et al., 2009)
- Parent and therapist massage & sensory-motor activities improved communication in preschoolers with ASD (Silva et al., 2011; Woo et al., 2015; Woo & Leon, 2013).
- **SBIs share theory with but are distinct from Ayres Sensory Integration Intervention, a client-led, developmental intervention with distinct research support (Watling et al., 2011)**

Environmental Adaptations P. 3

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- Adaptive equipment is openly presented as an individualized experiment, with adherence to class rules and progress toward goals guiding the need for continuing, modifying, or discontinuing its use.
- An individualized understanding of the student's sensory processing style guides parent/teacher/therapist consultations (Dunn et al., 2012) for developing adaptive equipment and techniques that improve student goal-directed behavior and learning (Dunn, 2007).
- Environmental Adaptations significantly improve functional skills in students with DD & Autism Spectrum Disorders (Ospina et al., 2008). Sensory Adaptive Equipment significantly reduced anxiety during stressful medical procedures in all children, but significantly greater effects were noted in stress reduction in children who had developmental disabilities (Shapiro et al., 2009)
- Weighted vests improved school attention while worn by students with ADHD (up to 10% body weight, worn 45 minutes on 45 minutes off) when individualized for goal attainment (Buckle et al., 2011; Lin et al., 2014). Weighted vests for students are more affective for attention in ADHD than reducing self-stimulation in Autism Spectrum Disorders.

WHERE should school therapists TREAT?

Individual Therapy

Tier 3: Tertiary Interventions & Supports

- Specialized Individualized Systems for Students with High-Risk Behavior
- Reduce severity of current cases

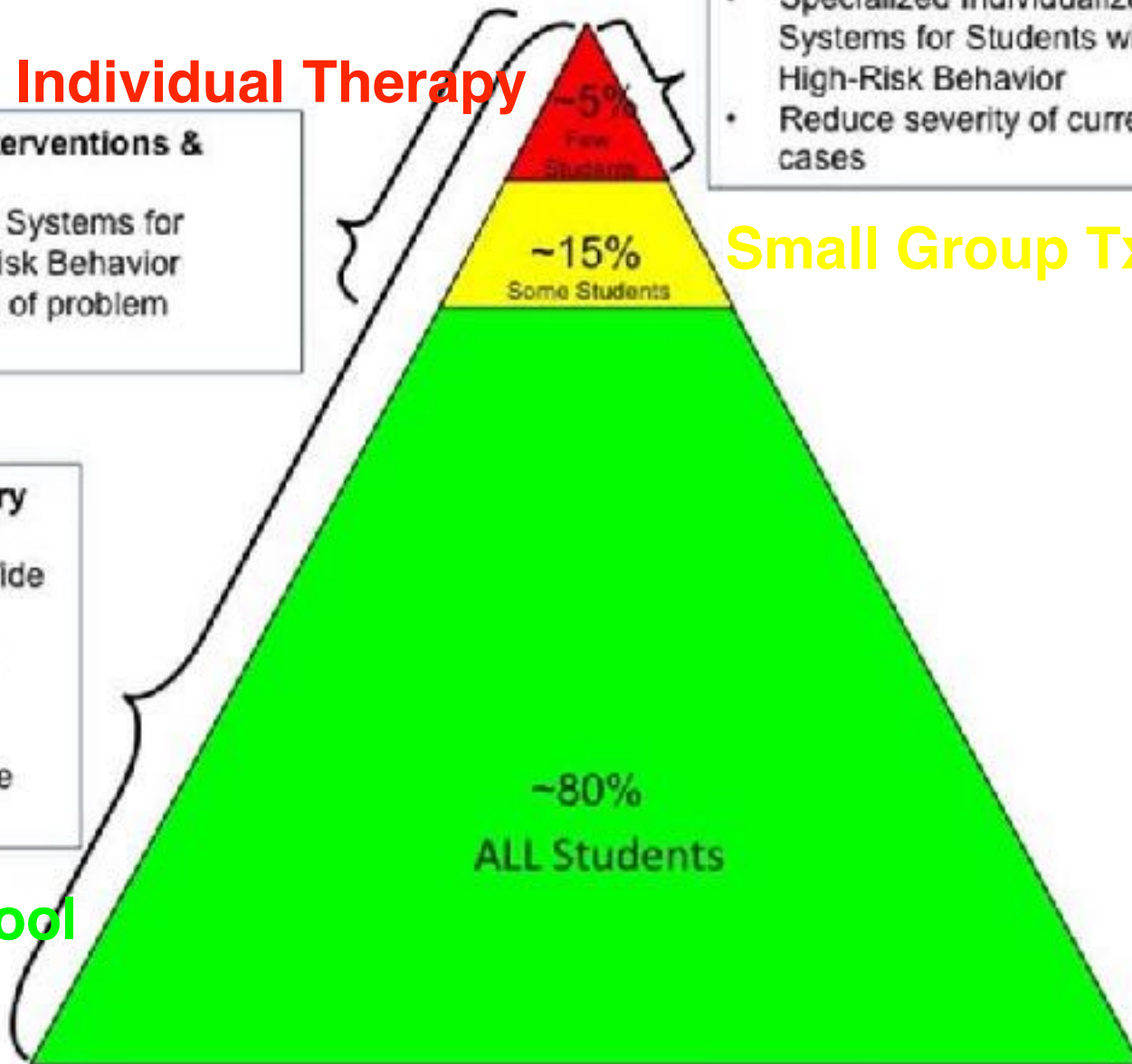
Small Group Tx

Tier 2: Secondary Interventions & Supports:

- Specialized Group Systems for Students with At-Risk Behavior
- Prevent worsening of problem behaviors

Tier 1 (Universal) Primary Prevention:

- School/Classroom-Wide Systems
- All Students, Staff, & Settings
- Reduce problem behavior and increase instructional time



Classroom/School

SBI's Integrating Mindfulness, Music, Movement, Exercise, Adaptive Equipment & Massage P. 4

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- OT develops preferred, goal-directed, individualized coping strategies
- Mindfulness, music, movement, exercise, adaptive equipment, self-touch, equipment touch, & massage can address common goals
- Combine movement, massage, & occupational tasks
- Goals of modulating arousal, improving body awareness, and increasing attention
- Independent, group, & one-to-one intervention
- Include regular long-term & crisis strategies

Client Coping Cards Supporting Adaptive Equipment

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I would like the pink slime
because I have major anxiety
and the slime helps release
it.





SBI Intervention Addresses P. 5

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1. Sensory Modulation Disorders-Difficulty regulating sensory registration to respond to functionally important environmental information and screen out functionally irrelevant input. 2-5 year olds with PDD had significantly greater hyper-reactivity, hypo-reactivity, and self-regulation difficulties (Ben-Sasson et al., 2007; Silva & Schalock, 2011). Assessed by Sensory Processing Measure: Preschool (2-5 yrs.), Home or Classroom (5-12 years) or Sensory Profile.

a. Sensory Over-responsivity *Sensory Sensitive/Hyper-reactivity*- react more to sensory, habituate slowly

b. Sensory Under-responsivity *Low Registration/Hypo-reactivity* do not notice sensory input, habituate quickly

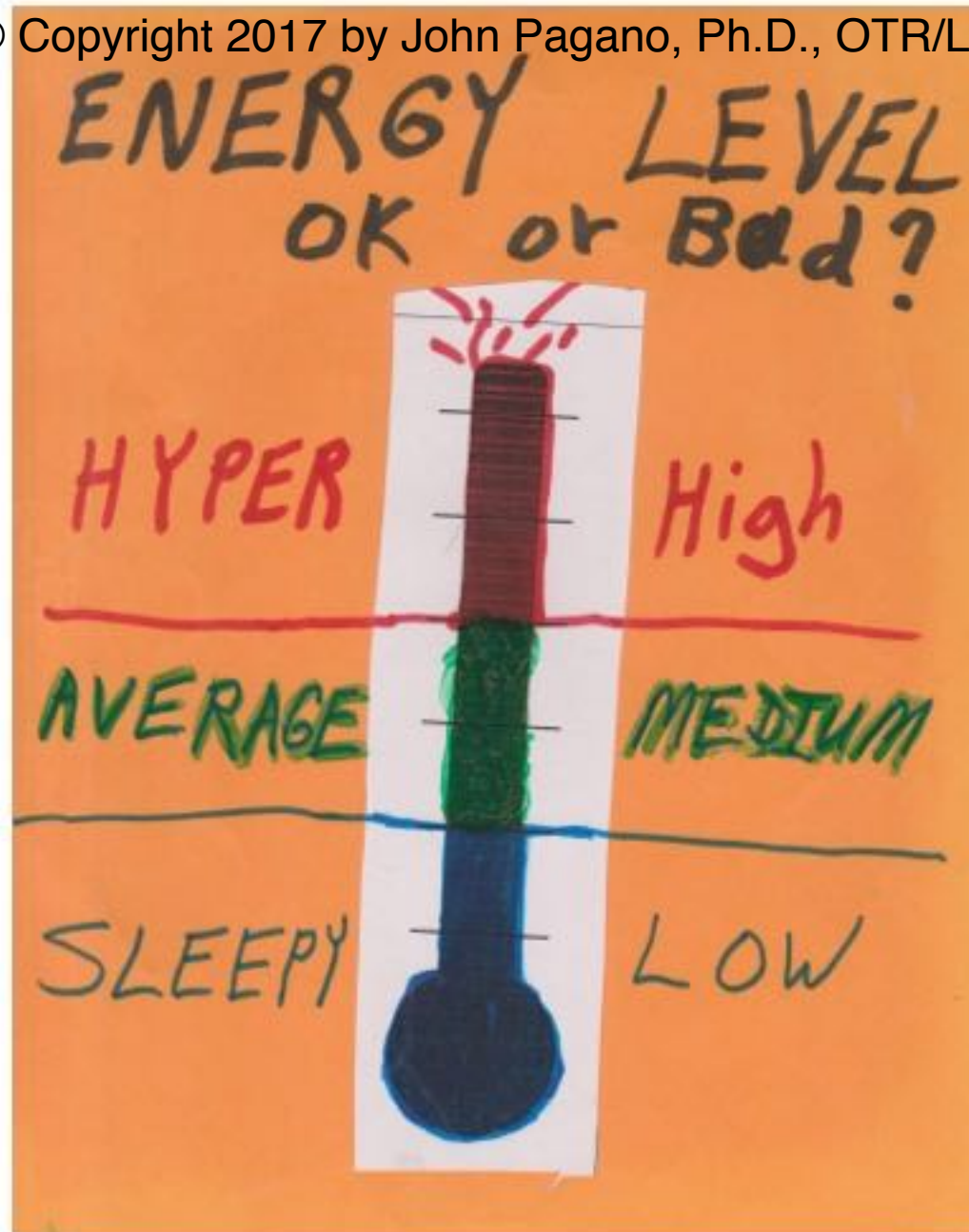
c. Sensory Seeking- actively seek out sensory input

d. Sensory Avoiding- actively avoid sensory input

(Watling et al., 2011; Schaaf & Mailloux, 2015)

Energy Level Basic fabstrategies.org

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SENSORY MODULATION STYLE

RATE from 0 (I'm Not/Strongly Disagree) to 5 (I Am/Strongly Agree)

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0 1 2 3 4 5

HYPORESPONSIVE

Low Registration

Quiet Alert State

0 1 2 3 4 5

HYPERRESPONSIVE

Sensory Sensitive

If significantly Hypo and/or Hyper-responsive
Decrease, then if needed sequentially increase sensory input
to maintain a Quiet Alert State

**HYPO-
RESPONSIVE**

**Low
Registration**

**Quiet
Alert
State**

**HYPER-
RESPONSIVE**

**Sensory
Sensitive**

ENERGY LEVEL

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Parasympathetic Dominant			Sympathetic Dominant
<u>HYPO-RESPONSIVE</u>	<u>QUIET</u>	<u>A</u>	<u>HYPER-RESPONSIVE</u>
Hopeless	<u>ALERT</u>	<u>LITRE</u>	Mad
<u>FEEL: SAD</u>	Happy	<u>HYPER</u>	Enraged
<u>NUMB</u>	Alert	<u>irritate</u>	Explosive
<u>DEAD INSIDE</u>		<u>Anxious</u>	Out of control
		<u>Nervous</u>	
<u>Drug/Alcohol Abuse</u>			
<u>ACT: Cut Self</u>	Think	<u>Yell</u>	Self-Injure
<u>Risk Taking</u>	Learn	<u>Cry</u>	Yell Flashbacks
Run Away		<u>Shake</u>	Scream
Suicidal Plan			Threaten
Freeze			Suicidal Plan
Compulsive			Alcohol Abuse
Submit			Sweating
Isolate			Not Eating
			Break things
			Spit Flight
			Return AWAY

HAND BREATHE & BIRD P. 7

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SITTING UPRIGHT IN SEAT DO 3 REPETITIONS

★ ***BOTH HANDS TOUCH HEAD, SHOULDERS, STOMACH (OR SUBSTITUTE)***

★ **NOSE BREATHE: TAKE 3 DEEP BREATHS**

IN STOMACH GOES OUT, FINGERS OPEN WIDE,

OUT STOMACH GOES IN FIST THUMB, DOUBLY SLOW BREATH

★ **BIRD-TAKE 3 DEEP BREATHS**

WINGS UP BREATHE IN

WINGS DOWN BREATHE OUT

SBI Intervention Addresses P. 8

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2. Sensory Discrimination Disorders-

difficulty distinguishing, interpreting, and organizing sensory information for functional use, contributing to disorganization and school difficulties. Sensory Discrimination Disorders can be for tactile, proprioceptive, vestibular and interoception sensory input e.g., hunger (Miller & Collins, 2012; Miller et al., 2007; Watling et al., 2011)

BODY SCHEME-Sensory Discrimination Disorder



BACK X & SPINE CRAWL

X MARKS THE SPOT *X on entire back*

WITH A DOT DOT DOT *3 dots with your fist*

AND A LINE LINE LINE *3 horizontal lines*

AND A QUESTION MARK *? on entire back*

“CRACK AN EGG ON YOUR HEAD *fist egg*

LET THE YOKE RUN DOWN” *finger yoke (2 X)*

CREEPY CRAWLIES UP YOUR SPINE

spine crawl with knuckles both sides spine

CREEPY CRAWLIES DOWN

palms down both sides spine

HOT CROSS BUNS ACTIVITY

(Meta-cognition: Sensory Discrimination, Sensory Based Motor)

BODILY-KINESTHETIC, INTERPERSONAL, AUDITORY, VISUAL & MUSICAL INTELLIGENCE

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- **HOT (HIGH NOTE HIGH FIVE)**
- **CROSS (LOW NOTE LOW FIVE)**
- **BUNS (MEDIUM, HORIZONTAL FIST)**
- **ONE A PENNY TWO A PENNY**
(NO RESPONSE)
- **HOT (HIGH NOTE HIGH FIVE)**
- **CROSS (LOW NOTE LOW FIVE)**
- **BUNS (MEDIUM, HORIZONTAL FIST)**
(McChessy, 2010. Movement & Movement. Richards Institute)

1st Sensory Modulation Disorder

Low Registration

Sensory Seeking

Sensory Sensitive

Sensory Avoiding

Gravitational Insecurity

Tactile Defensiveness

3rd Sensory Based Motor Disorder

Praxis

Postural Disorder

Ideation

Motor Planning

Execution

2nd Sensory Discrimination Disorder

Interoception

Pain

Hunger

Thirst

Vestibular

Proprioception

Tactile Discrimination Disorder

Gustatory

Olfactory

Visual

Auditory

Mindfulness Research

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- Basic mindfulness activities improved executive functioning in elementary school students, with the greatest improvement seen in children with the initially worst attention and self-control difficulties (Flook et al., 2010)
- Mindfulness intervention with adolescents who had conduct disorder significantly reduced their anxiety, depression (Biegel et al., 2009) aggression, antisocial (Diamond & Lee, 2011; Singh et al., 2007) and self-injurious behaviors (Miller et al., 2007).
- Pediatric PTSD interventions that improved self-regulation included exercise, mindfulness, sensory enhanced yoga, and massage (Perry, 2009; Stoller et al., 2012)
- Yoga and meditation improved behavior in students with special needs (Koenig et al., 2012).
- Focus on feet significantly improved behavior in adolescents with Prader-Willi Syndrome (Singh et al., 2008) and conduct disorder aggression (Singh et al., 2007)

MINDFUL CLOCK SITTING/STANDING

© Copyright 2015 by John Pagano, Ph.D., OTR/L
(Greenland, 2010)

★ MINDFUL CLOCK SITTING

TIC SWAY FORWARD TOC SWAY BACK

LIKE A SWAY FORWARD CLOCK SWAY BACK

'TIL WE SWAY FORWARD FIND OUR SWAY BACK

CENTER MOVE CENTER

TIC SWAY LEFT do a righting reaction (head and trunk flex uphill)

TOC SWAY RIGHT do a righting reaction (head and trunk flex uphill)

LIKE A (Sway Left) do a righting reaction (head and trunk flex uphill)

CLOCK (Sway Right) do a righting reaction (head and trunk flex uphill)

'Till WE (Sway Left) do a righting reaction (head and trunk flex uphill)

FIND OUR (Sway Right) do a righting reaction (head and trunk flex uphill)

CENTER (Center)

★ MINDFUL CLOCK STANDING

TIC SWAY FORWARD TOC SWAY BACK

LIKE A SWAY FORWARD CLOCK SWAY BACK

'TIL WE SWAY FORWARD FIND OUR SWAY BACK

CENTER MOVE CENTER

TIC-SQUAT DOWN

TOC-STAND ON TOES

LIKE A-SQUAT DOWN

CLOCK-STAND ON TOES

'Till WE-SQUAT DOWN

FIND OUR-STAND ON TOES

CENTER-CENTERED

TENSE & RELAX, FOCUS ON FEET/PALMS

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★ TENSE & RELAX

TENSE AFTER I SAY 1-2-3-GO IMMEDIATELY
RELAX

TENSE PRUNE & GRAPEFRUIT DRINK
FACE (3 X)

ELEVATE BOTH SHOULDERS (3 X)

MAKE FISTS TO SQUEEZE ORANGES INTO
JUICE

Circles: Neck, Shoulders, Hips-Circles, Infinity

★ FOCUS BOTTOM OF THE FEET /PALMS
after press together

FLEX & EXTEND SHOULDER & ANKLE & 4-4-6-2 Breathing

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•Flex & Extend Shoulder & Ankle:

Same side: Right shoulder-ankle simultaneously

Opposite-Right shoulder left ankle simultaneously

Same half-Right shoulder, left ankle, and left shoulder half way
up and down, by joining right shoulder

•4-4-6-2 Breathing:

4 seconds BREATHS IN

4 seconds HOLD BREATH

6 seconds BREATHE OUT

2 seconds HOLD BREATH

(Brown & Gerbarg, 2012)

Relationship Between Sensory Modulation & Behavior Disorders

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- One quarter of school aged kids with significant sensory sensitivity also had a psychiatric disorder (Carter et al., 2011).
- Early trauma can establish maladaptive patterns of hyper-arousal and under-responsivity that increase vulnerability to behavioral and social problems (McCrary et al., 2010)
- 48% of 4-year olds with Definite Differences on the Sensory Profile had significant anxiety, depression, ADHD, or ODD disorders, while 52% did not (Gouze et al., 2009)

Sensory Processing Intervention for PDD, Early Trauma & Mental Illness

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- One-third of 4-year olds with Definite Differences in self-regulation had severe psychiatric disorders while two-thirds did not (Gouze et al., 2009)**
- Early trauma can establish maladaptive patterns of hyper-arousal and under-responsivity that increase vulnerability to behavioral and social skill problems (McCrary et al., 2010)**

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- ♣ **A structured classroom environment with maximal open space, dividers, and minimal distractions.** *Cut out foot prints, stop signs, and masking tape can help students remember physical boundaries. Study carols and optimally stable sitting (symmetrical, neutral pelvis against seat back, ninety degree angle of thighs, calves, and supported feet) can promote attention. Children with good balance but difficulty remaining seated can benefit from Theraband tied on the legs or arms of their chair, disk-o-sit cushions therapyball seats, or standing.*
- ♣ **Maximizing students opportunities to respond in class with small erasable boards they hold up to answer questions, computer assignments, and peer tutoring.**
- ♣ **Teach, review, and post a few major classroom procedures and expectations.** *Strategically place visual schedules, social stories, choices, self-control reminders; prepare before transitions; directions to choose 1 activity for a set period before cleaning up and choosing another task; and a designated sensory quiet area in the class room can promote direction following.*
- ♣ **Teach feelings and social skills using positive behavioral support strategies.** *Basic positive behavioral support strategies (Turtle technique, Character comics; Play plan and review; Stretching exercises, Favorites toss, Focus on feet, Tense & relax muscles; Freeze dance) can be co- led with school related services mental health, occupational, speech-language and physical therapists. For challenging groups it is especially helpful to use co-leaders, one leads the group while the other supports students with direction following.*
- ♣ **Sticker chart system rewarding specific desired behavior.** *Differential reinforcement can reward students for avoiding inappropriate, self-injurious, or aggressive behavior. Children who work with multiple staff can construct and use a Coping card- a laminated index card listing their behavior goal, reinforcement plan, and pictures of their preferred character and coping strategies.*
- ♣ **Group reinforcement opportunities for the class to earn special privileges through appropriate behavior.** *Additional positive behavioral support activities, mindfulness games, exercise, movement, and music breaks (e.g., Giant steps, Simon says, Mindful clock, Lean on me song & dance, Hot cross buns activity, Pushups) can be earned by the class for safe behaviors during break activities and returning to class work immediately after breaks.*

Reference: Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management:

Best Clinical Resources

- Autism Modulation Visuals visuals.autism.net
- Behavior Visuals <www.challengingbehavior.org>
- Dunn, W. Sensory Profile <www.sensoryprofile.com>
- Laugeson, E. A. (2014). The PEERS curriculum. www.semel.ucla.edu/peers
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Reducing Restraint and Seclusion: The Benefit and Role of Occupational Therapy

Occupational Deprivation and Restraint and Seclusion

Occupational deprivation is the act of prohibiting an individual from participating in a meaningful activity (Wilcock, 1998; Munoz, 2011). Recently, the concept of occupational deprivation has been applied to disenfranchised youth (see for example Bazyk & Bazyk, 2009). When students are chronically restrained or secluded, they may experience occupational deprivation as a result of being kept from their peers and what most would consider typical school activities. Children and youth who endure occupational deprivation at school may experience decreased volition and identify less with the role of student. Occupational therapy practitioners who provide services in settings that habitually use restraint and seclusion may use occupational enrichment as a way to reduce the impact of occupational deprivation to children and youth. *Occupational enrichment* is the process of intentionally adjusting the physical and social environment to provide structured opportunities that promote engagement in meaningful activities that the student would otherwise typically perform (Molineux & Whiteford, 1999; Munoz, 2011). For example, an occupational therapy practitioner working at a therapeutic day school for children with aggressive behaviors may provide students with opportunities that they are missing out on by not attending their general education schools. He or she might focus on creating opportunities for social participation (e.g., playing board games) or help students to assume new roles (e.g., setting up classroom jobs). The practitioner might also work with the educational team to understand the effects of both chronic short-term (e.g., being secluded for a 30-minute period) and long-term (e.g., being removed from a general education school) occupational deprivation.

OCCUPATIONAL THERAPY PRACTITIONERS use meaningful activities to help children and youth participate in what they need and want to do to promote their physical and mental health and well-being. Occupational therapy practitioners focus on the usual occupations of childhood, including participation in education, play, leisure, social activities, activities of daily living (e.g., eating, dressing, bathing), and instrumental activities of daily living (e.g., completing chores, shopping). Task analysis is used by occupational therapy practitioners across a variety of pediatric settings (e.g., schools, community centers, hospitals) to identify factors (e.g., motor, process, communication-interaction, sensory) that restrict or inhibit meaningful participation in the various roles associated with childhood (e.g., student, family member, friend).

ABOUT RESTRAINT AND SECLUSION

The use of restraints and seclusion in schools serves two primary functions. The first function is to limit harmful, aggressive, or negative behaviors; the second function is to deter the use of such behaviors by children and youth in the future (LeBel, Nunno, Mohr, & O'Halloran, 2012). Some children and youth demonstrate aggressive behaviors at school and some educational agencies (e.g., public school districts, private therapeutic day schools, hospital-based school programs) use restraint and seclusion to manage such behaviors. *Restraints* are defined as physical methods that impede an individual's freedom to move or engage in physical activity (Ryan & Peterson, 2004). The common types of restraints that are often used with children and youth in school settings are mechanical restraints and ambulatory restraints.

Mechanical restraints include any type of equipment or device that is applied to a student in an attempt to restrict the student's movement and manage or control his or her negative behaviors (Council for Children with Behavioral Disorders [CCBD], 2009). Examples of mechanical restraints include tape, ropes, and belts (CCBD, 2009). Although sometimes used as a restraint to prevent free movement, devices such as lap belts may also be used to improve postural control. When lap belts or other equipment are used solely for therapeutic purposes rather than to restrict movement, they are not considered to be restraints (LeBel et al., 2012).

Ambulatory restraints—sometimes called *manual restraints*, *physical restraints*, or *holding*—involve using one's own body to forcibly restrict a student's body and/or movement (Ryan & Peterson, 2004; CCBD, 2009). Many educational agencies have attempted to reduce the use of ambulatory or physical restraints due to the eminent risks that they pose to the safety and well-being of children and youth. The risks to children and youth that have been associated with physical restraints include damaged joints, broken bones, skin irritation, and even death (CCBD, 2009). Ambulatory or physical restraints are considered to be corporal punishment by the American Civil Liberties/Human Rights Watch, and the literature suggests that when used in non-emergency situations, ambulatory or physical restraints can lead to increased student aggression and violence (LeBel et al., 2012).

Seclusion is defined as any type of involuntary confinement of a student (LeBel et al., 2012). Seclusions are sometimes referred to as "time outs." A key difference between the time outs that are often given to children by parents (e.g., removed from a situation and asked to sit in a designated area until a timer goes off) and what is considered to be seclusion is that seclusion involves the child being physically (and sometimes forcibly) prevented from leaving the designated area. Ambulatory or manual restraints are sometimes used during seclusion procedures as a means to keep the child from leaving the designated area.

Continued on page 2.

RELEVANCE TO MENTAL HEALTH

Restraints and seclusion should only be used by educational teams as a last resort or in emergency situations to keep children and youth safe in schools. Besides the potential for causing physical injuries, the use of restraints and seclusion has the potential to negatively impact a student's mental health. Children and youth who have been forcibly restrained may experience posttraumatic stress as a result of their treatment. Students may experience nightmares and intrusive or repetitive thoughts related to the restraint experience, and they may develop a tendency to avoid physical contact and/or situations that cause them to remember the restraint experience (Mohr, Petti, & Mohr, 2003). Children and youth who have been restrained may also develop a sense of mistrust of service providers (Mohr et al., 2003). Given the negative impact of restraint and seclusion, it is fortunate that many schools are developing policies and procedures to reduce their use.

OCCUPATIONAL THERAPY PRACTITIONERS can play an important role in helping educational teams to reduce their use of restraints and seclusion. Occupational therapy practitioners can offer a unique contribution to evaluation and intervention planning that addresses the complex challenges posed by students' use of aggressive behaviors in the classroom and other school environments. Occupational therapists can use formal and informal assessment tools to identify the sensory, motor, social-emotional, and cognitive factors that may contribute to a student's aggressive behaviors and help the school team develop positive strategies to decrease the need for restraint and seclusion (LeBel & Champagne, 2010). Occupational therapy practitioners may work with teams to develop student-centered interventions that focus on *establishing pro-social habits and routines, using occupation to enhance and promote self-regulation and relaxation, and developing strategies for managing symptoms (e.g., stress, anger, anxiety) that are associated with the use of aggressive behaviors.*

Occupational therapy practitioners can also serve an important role by evaluating and addressing the environmental factors that contribute to a student's use of aggressive behaviors. Finally, occupational therapy practitioners can apply their unique understanding of the occupational needs of certain populations, such as those children and youth diagnosed with autism spectrum disorder, attention deficit hyperactive disorder, oppositional defiant disorder, bipolar disorder, trauma disorder, and other mental health disorders in order to support their overall participation at school.

LEVELS OF INTERVENTION

Promotion

Occupational therapy practitioners can provide unique contributions to developing school policies and procedures that reduce aggression and the need for restraint, seclusion, and expulsion. Because their services are frequently popular with students, occupational therapy practitioners can promote the use of school-wide efforts to create positive behavior management systems (e.g., incentives-based systems). Occupational therapy practitioners can also promote positive mental health for all students by fostering a culture of respect, citizenship, and stewardship.

Prevention

Occupational therapy practitioners can work with educational teams to prevent students from engaging in aggressive behaviors that warrant restraints or seclusion. Occupational therapy practitioners can educate students and staff regarding the sensory, motor, social-emotional, and cognitive factors contributing to aggressive behavior. Occupational therapy practitioners can educate students and staff on environmental triggers, body triggers, and a variety of coping strategies, including those that are sensory based. In addition, they can set up break areas where students can go to calm themselves down and/or use some calming sensory strategies (Gardner, Dong-Olson, Castronovo, Hess, & Lawless, 2012; Sutton, Wilson, VanKessel, & Vanderpyl, 2013).

Continued on page 3.

CHECK THIS OUT!

- The U.S. Department of Education has developed laws and guidance about seclusion and restraint, including a framework of 15 principles that should be used when establishing policies and procedures <http://www2.ed.gov/policy/seclusion/index.html>
- *CCBD'S Position Summary of The Use of Physical Restraint Procedures in School Settings—* Guidelines for teachers and other educational providers http://c.ymcdn.com/sites/www.copaa.org/resource/collection/662B1866-952D-41FA-B7F3-D3CF68639918/Accepted_CCBD_on_Use_of_Restraint_7-8-09.pdf
- *A Review of Crisis Intervention Training Programs for Schools—* Teaching exceptional children <http://www.maine.gov/education/rulechanges/chapter33/022411dbutlercitreviewofresstraintsinschoolsinschools.pdf>
- *Abuse, Restraints, and Seclusion in School—* Legislation and lawsuits related to using seclusion and restraints in school <http://www.wrightslaw.com/info/abuse.index.htm>
- AOTA Fact Sheet: *Occupational Therapy's role in Restraint Reduction or Elimination* <http://www.aota.org/-/media/Corporate/Files/AboutOT/Professionals/WhatsOT/MH/Facts/Restraint%20fact%20sheet.pdf>

Reducing Restraint and Seclusion: The Benefit and Role of Occupational Therapy

Occupational therapy practitioners can teach students to ask for a break when they experience triggers, and teach staff to respond to the request for breaks positively. In addition, occupational therapy practitioners can coach students regarding the use of self-regulation, problem solving, and self-calming strategies. Finally, occupational therapy practitioners can consult with teachers to (1) identify alternative strategies to reduce aggression in the classroom, such as using visual supports to teach strategies that accommodate diverse learning styles and reduce stress (particularly for students who are young or have intellectual disabilities); (2) adapt the curriculum to address students' needs; and (3) establish classroom habits and routines that promote the development of self-regulation.

Intensive

Occupational therapy practitioners may also be able to offer intensive supports and services to students who demonstrate aggressive behaviors. Occupational therapy practitioners can work with educational teams to conduct functional analyses of behavior in order to identify the meaning of a student's aggressive behavior, as well as the behavior's causes (i.e., antecedents), environmental setting events (e.g., crowding), and outcomes (i.e., consequences) (Murray-Slutsky & Paris, 2005). Occupational therapy practitioners may also provide group and individual occupational therapy services to help reduce physical aggression and the need for restraint and seclusion.

After careful assessment, occupational therapy practitioners can work with students and teachers to develop environmental adaptations and individualized coping strategies that support the student's participation and help him or her to remain calm (Gardner et al., 2012; Sutton et al., 2013). Group and individual intervention allows for in-depth understanding and identification of students' unique goals, their academic and participation baselines, environmental triggers, body triggers, and coping strategies to reduce aggression. Occupational therapy services can include individualized environmental adaptations (e.g., seat placement and positioning, use of adaptive pencil grips to make writing easier, assignment modifications), the development and implementation of emotional regulation strategies (e.g., self-identifying arousal level, environmental triggers, body triggers, and coping strategies), and the identification of optimal curriculum modifications (e.g., optimally stable seating close to the teacher, movement breaks, mindfulness activities, adjustments of teaching methods to student learning style).

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