

**2-Day Train the Trainer Institute:
Decrease Disruptions & Improve
Learning for Students with Complex
Behavioral Challenges (PreK-12th)**

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www.pinterest.com/FABStrategies

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Schedule Day One P. 2

- 9:00-10:00 Introduction & Course Resources
- 10:00-10:30 Mindfulness to Improve Behavior
- 10:30-10:45 Program Manager & Break
- 10:45-12:00 Environmental Adaptations
- 12:00-1:00 Lunch Break
- 1:00-2:10 Teaching Self-Control & Sensory Strategies to Improve Behavior
- 2:10-2:20 Break
- 2:20-2:40 Staff Training Group
- 2:40-3:00 Staff Training & Consulting
- 3:00-3:30 Sign out ticket Questions

Schedule Day Two P. 3

9:00-10:15 Positive Behavior Strategies

10:30-10:45 Morning Break

10:45-12:00 Physical Self-Regulation

12:00-1:00 Lunch Break

1:00-2:00 Parent &

2:10-2:20 Afternoon Break

2:20-3:00 Individualized Treatment Group

3:00-3:30 Questions & Summary

Best Clinical Resources P. 4

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- Autism Visuals visuals.autism.net
- **Behavioral Strategy Tucker Turtle (FAB Turtle Strategy)**
<https://challengingbehavior.org/?s=Tucker+Turtle>
- **Behavioral Strategy Feeling Wheel**
<https://challengingbehavior.org/?s=Feeling+Wheel>
- Brown, R. P. & Gerbarg, P. L. (2022). The healing power of breath. Boston, MA: Shambhala. www.breath-body-mind.com
- DECA Assessment & PBS www.devereuxearlychildhood.org
- Greenland, S. K. The Mindful Child. New York, NY: Free Press.
<http://susankaisergreenland.com>
- Laugeson, E. A. (2014). The PEERS curriculum. www.semel.ucla.edu/peers
- Miller, L. J.. 2022. Sensory Processing. <https://sensoryhealth.org/>
- Mindfulness Bells 5 breaths/minute <https://coherentbreathing.com/2>
- Prat, S. (2022). The neuroscience of you. Dutton
- **Practical Positive Behavioral Support Help** <www.pbisworld.com>
- Silva et al. QST program Sensory Massage. www.qsti.org
- **Stahmer & Suhrheinrich, 2021. Classroom Pivotal Response Teaching.** NY, NY: Guilford Press. www.classroomprt.org

Mindfulness Research P. 5

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★ **Turbulence Story**

- ★ Slow breathing activities significantly reduced anxiety, depression and trauma symptoms in children and adolescents with developmental, PTSD, and mental health challenges (Brown & Gerbarg, 2022; Manuel, 2022)
- ★ Mindfulness training significantly decreased bullying behavior difficulties in elementary school students (Faraji et al., 2019)
- ★ Feel your feet significantly improved behavior in adolescents with conduct disorders and aggressive behaviors (Singh et al., 2016)
- ★ Pediatric PTSD interventions that significantly improved self-regulation included mindfulness, exercise, sensory enhanced yoga, and massage

Move: Head-Shoulders, Hip Circle/Tense & Relax/

Feel your Feet P. 6

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★ Move: Head, Shoulders, Hip Circles

**Make slow circles with head alternately breathing in then out to a count of four;
Reverse**

**Make slow circles with shoulders up-back-down alternately “breathing in” then
“breathing out” ; Reverse**

Make slow hip circles alternately “breathing in” then “breathing out” ; Reverse

★ 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 JUIC

★ Feel your Feet

Put all your attention on the bottom of one foot

In the back of your foot feel your heel

Notice the arch of your foot in front of the heel, if it touches the floor

Move forward and notice the ball of your foot

**Notice your big toe, the toe next to it, see if you can bend and feel your middle toe,
then your little toe**

Slow Breathing: *Hand & Shaking* P. 7

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“Open your hands” and Close your hands as soon as teacher models & says

BREATHING IN STOMACH GOES OUT while FINGERS OPEN WIDE;

BREATHING OUT STOMACH GOES IN fist over pointer & index finger (Mushti Mudra decreasing rage), DOUBLY SLOW

Shaking: Bend & straighten knees letting arms shake like rag doll or ropes. Increases body alertness; *while playing song Song I got you(I feel good) James Brown*

FAB STRATEGIES® P. 8

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“FUNCTIONALLY ALERT BEHAVIOR”

Curriculum guiding individualized clinical reasoning addressing behavioral goals:

A. ENVIRONMENTAL ADAPTATIONS

B. SENSORY MODULATION

C. POSITIVE BEHAVIOR SUPPORT

D. PHYSICAL SELF-REGULATION

Develop individualized intervention by integrating the research evidence, client/family values, environmental context, benefit, and risks (Ashburner et al., 2014)

FAB Strategies® for Learning Readiness Form

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X-Therapist ✓-Staff & family A-Attachment Circle-Equipment given

Student: _____ Teacher/Therapist: _____ Contact: _____
Functional Goals: _____ Dates: _____
Dates/Baselines: _____

A. ENVIRONMENTAL ADAPTATION

- ___ Prepare-Limit-Transitions/Low noise/Headphones/Fidget-Comfort Box-Bag
- ___ Seat Stable-Separate-Carrel-Near teacher-Theraband-Disc O Sit/Clip-Slant board/Pencil grip
- ___ Visual List-Schedule-If then-Calm face/Slow: Speaking-Pace/Sensory coping Area-Room
- ___ Choice of 1 activity from 1 2 3 4 choices; do ___ sec./minutes minimum; clean up before next activity

B. SENSORY MODULATION

- ___ Move Head-Shoulders-Hip circles/Tense & relax/Mindful clock Sitting-Standing
- ___ Slow breathing Hand-Finger Paint-Tracing-Squeezing-Energy ball-Circle body-Heart/Feel your feet
- ___ Self-squeezing Shoulder-Arm-Fingers/Shaking/Kindness/4-2-4-2-Movement/4-4-6-2-Movement
- ___ Arousal level-Modulate/Deliver Books-Messages/Freeze dance/Giant steps/Simon says/10 hotdogs
- ___ Twirling bead chain/Ipad apps Big bang patterns-Mebop maestro-ABC kids-Drawing-Stylus
- ___ Sequentially explore Beans-Rice-Theraplast-Playdoh-Sand-Wiki stix-Water-Floof-Glue-Shaving cream
- ___ Head crown/Shoulder Squeeze-Press/Spine roll/Back X/Spine Crawl/Light, slow letters on back
- ___ Brush-Vibrate-Press: Back-Arms/Self-Brushing/Self-Buzzing
- ___ Chewy/Vest-Pressure-Weighted-Blanket/Roll ball Core-Breathing/Back Tech: Pressing-Tapping

C. POSITIVE BEHAVIOR SUPPORT

- ___ Ask permission to Kid-Touch/Head filter/Invite/Still like you/Facing door/Grounding/Partial sentences
- ___ Conditioned calm/Mand-Break/Sensory match-Coaching/Desensitization/Practice saying/Redirection
- ___ Pre-correction/Self-management/Tolerance for delay/Coping card/FAB turtle/Revise curriculum
- ___ Preferred: Tasks/Distractor/Choices/Pre-play/Intersperse learned tasks/Priming/Prompts
- ___ Reinforce: Good attempt-Appropriate-Point chart-Tangible-Desensitization-Self-management

D. PHYSICAL SELF-REGULATION

- ___ Push wall/Marine-Wall-Pushups/Exercise band tasks/Pull-ups/Treadmill/Weight lift/Punch heavy bag
- ___ Prone on therapy ball: Hands rock-Wheelbarrow walk-Fly/Playground-Structure/Quadruped pass
- ___ Ball: Soccer-Pass-Wall-Letter-Bat-Bounce activities/Beanbag pass/Mini-trampoline jumping
- ___ Sequential: Orienting/Drawing/Bilateral integration/Drumming
- ___ Supported sit on therapy ball: Forward & back-Up & down-Sides-Mindful clock
- ___ Crash pad/Scooter board: Self-propel-Pull-Push/Suspended Swing: Forward & Back-Lateral-Spin
- ___ Activities: _____
- ___ Activities: _____
- ___ Activities: _____

www.fabstrategies.org www.pbisworld.com www.spdstar.org breath-body-mind.com

Parent/guardian Signature Supporting Program: _____

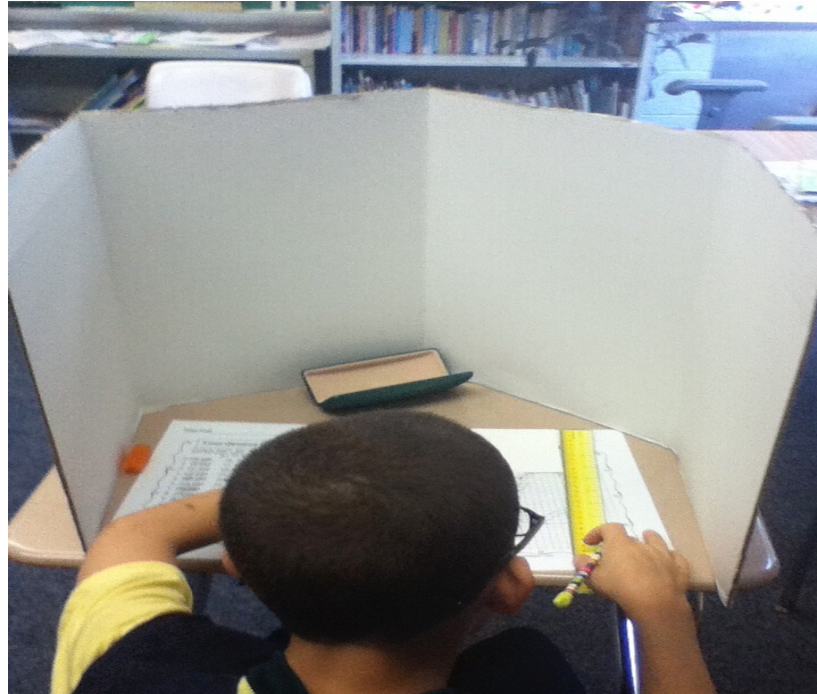
Environmental Sensory Strategies for Learning P. 9

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- **Assistive technology (AT)** promotes the functioning of students with a variety of special needs in schools, particularly inclusion in the regular classroom. Teacher needs to be trained to implement simple sensory strategies enhancing the salience of teaching cues (e.g., picture directions, simultaneously hearing and reading info, highlighter for plus sign key info, fidget use to enhance listening), computer applications, as well as complex robots to enhance learning (Zilz & Pang, 2021)
- Learning and behavior improved in youth with ASD and Sensory Sensitivity definite differences by reducing auditory, tactile & especially combined distractions through: desks separate, carrel, headphones, earmuffs, thicker walls between areas, such as further seat separate; structurally lower noise; use head phones, earplugs, earmuffs, FM system, and gradually get them use to noise (Green et al., 2015)

Seat: Carrel

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Seat: Theraband (on Chair legs or arms) P. 10

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Tie Theraband around the legs or arms of the seat so student can kick or push it. Provides deep pressure and movement for increased seated attention. Taken away if untied or peers are touched or disturbed.

Visual: Schedule

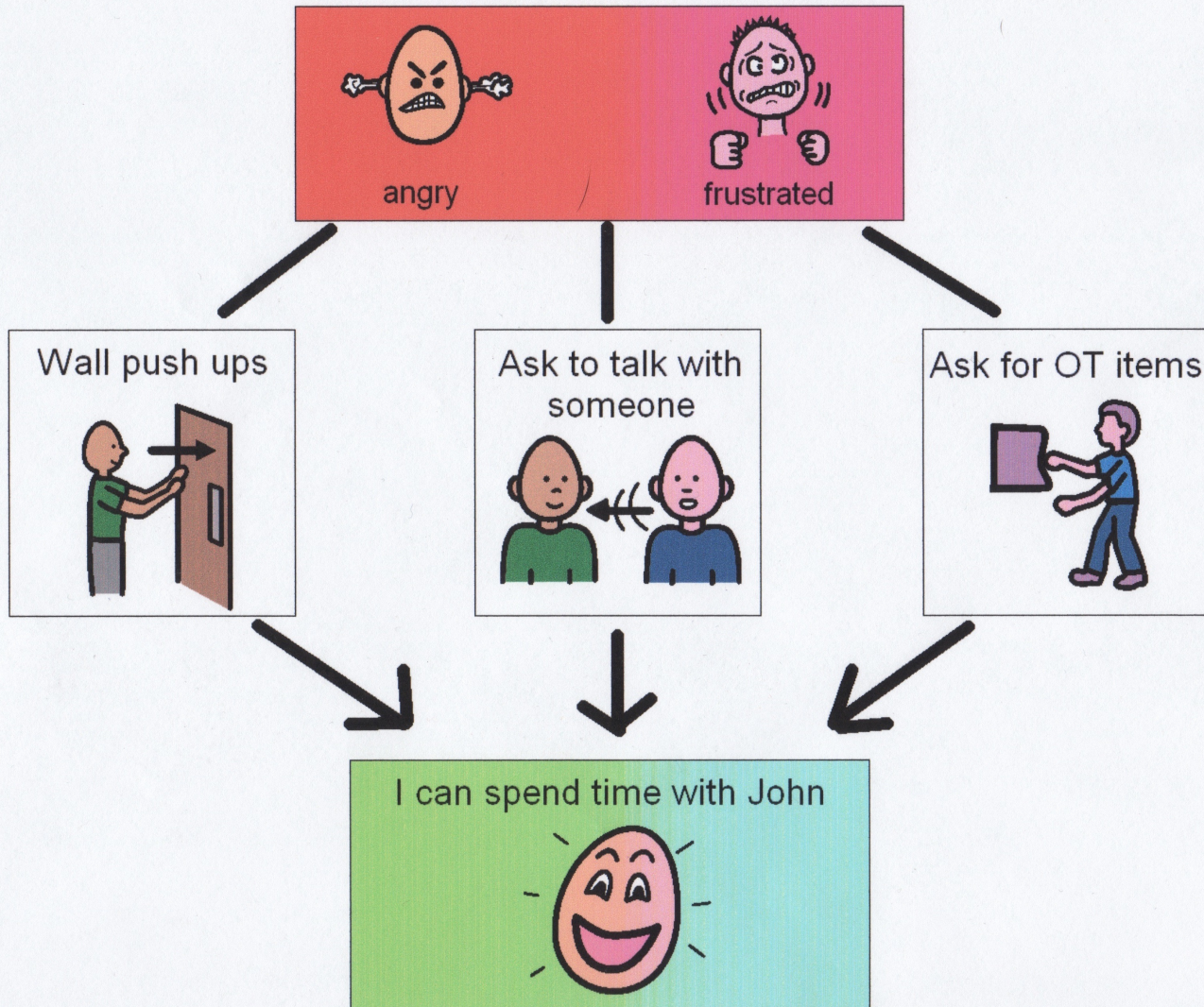
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Visual: If then

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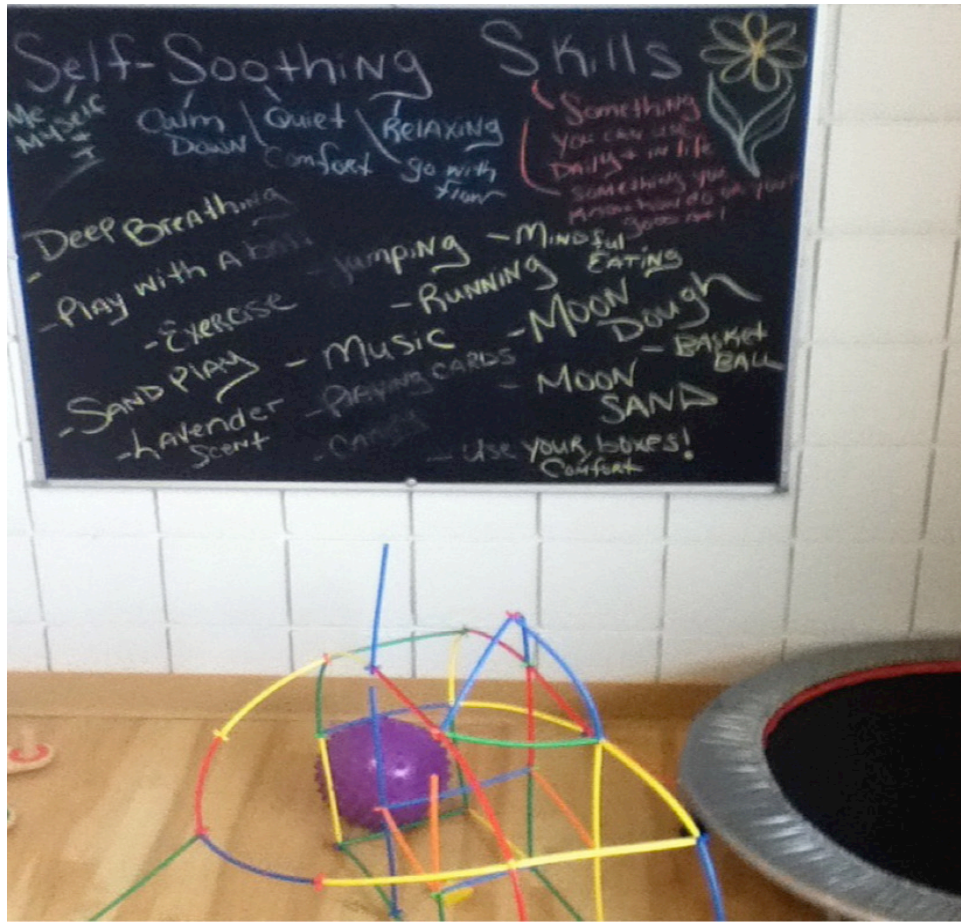
CALM DOWN BOARD



Sensory Coping Area/Room P. 11

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Sensory Coaching- Behavior, learning, and adult efficacy enhanced by coaching parents and teachers
e.g., cut tags, shoes off seated (Pashazadeh et al., 2019)



We All Need Somebody to Lean On **by Club Nouveau**

**SOME TIMES IN OUR LIVES
WE ALL HAVE PAIN
WE ALL HAVE SORROW
BUT IF WE ARE WISE
WE KNOW THAT THERE'S
ALWAYS TOMORROW**

**LEAN ON ME
WHEN YOUR NOT STRONG
AND I'LL BE YOUR FRIEND
I'LL HELP YOU CARRY ON
FOR IT WON'T BE LONG
'TILL I'M GONNA NEED SOMEBODY
TO LEAN ON**

**PLEASE
SWALLOW YOUR PRIDE
IF I HAVE THINGS
YOU NEED TO BORROW
FOR NO ONE CAN FILL
THOSE OF YOUR NEEDS
THAT YOU WON'T LET
SHOW**

**LEAN ON ME
WHEN YOUR NOT STRONG
AND I'LL BE YOUR FRIEND
I'LL HELP YOU CARRY ON
FOR IT WON'T BE LONG
'TILL I'M GONNA NEED
SOMEBODY TO LEAN ON**

**JUST CALL ON ME BROTHER
WHEN YOU NEED A HAND
WE ALL NEED SOMEBODY
TO LEAN ON
I JUST MIGHT HAVE A PROBLEM
THAT YOU'LL UNDERSTAND
WE ALL NEED SOMEBODY
TO LEAN ON**

**LEAN ON ME
WHEN YOUR NOT STRONG
AND I'LL BE YOUR FRIEND
I'LL HELP YOU CARRY ON
FOR SAID IT WON'T BE LONG
'TILL I'M GONNA NEED SOMEBODY
TO LEAN ON**

WE BE JAMMIN

WE BE JAMMIN

WE BE JAMMOOOON

WE BE JAMMIN

WE BE JAMMIN

WE BE JAMMOOOON

**JUST CALL ME
WHEN YOU NEED A
FRIEND
CALL ME (3X)**

www.youtube.com/@PaganoFABStrategies

***Complex Behavioral Challenges & No Academic challenges yet P. 12A**

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- **Reinforcement so Happy, Relaxed, Engaged**
- **Graded, realistic** behavior goal with baseline data
- **Modulate arousal level** (to calm alert), **Revise curriculum** (developmental preferred learning tasks) , **Reinforce appropriate behavior silently,**
- Approved plan for the worse, hope for the best
- Sensory & preference assessment to learn/reinforce
- Coping cards rewarding “safe hands” or “polite mouth”
- Teacher does Check-in Check-out CICO & can add (CICOPlus Tier 1 school MH

(Myers et al., 2017; Glover et al., 2022; Karhu et al., 2021)

Modifications P. 12B

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- Frequent short movement breaks
- Intersperse easy with more challenging questions targeting frustration tolerance, flexibility, & problem solving
- Curriculum level may need to be temporarily eased to significantly decrease disruptions as behavior is addressed e.g., safe transitions

BACK X & SPINE CRAWL

X MARKS THE SPOT *X fist on back, slow & light*

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

Proactive School Planning for Severe Aggression 12C

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- A team including teachers, therapists and administrators plan pre-correction for incidences by a student.
- Older helping younger student groups with extra teacher supervision help everyone.
- Some students are unable to calm down independently once they reach a certain state or arousal.
- Restraint is reinforcing and used for safety of other students, staff and the student.
- It is crucial that staff act real calm and if possible remove peers to a play area.
- No revenge but restitution “repair” can be helpful.
- Pediatric psychiatry and special schools are tricky but can be helpful with teacher input.

Keep safe hands
don't hurt my self
when I get upset



← Spong ebob



Sensory Modulation Assess & TX P. 14

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1. **Sensory Profile** is a standardized, norm-referenced assessment of significant sensory modulation differences. Can redo to monitor sensory changes but not to assess effectiveness of intervention
2. Can assess with Sensory Profile : Infant/Toddler, (2-5 years), Class (5-12), Adolescent/Adult (12 and older) **Short Form** (1999), **Short Form 2** (2014) that differentiates total Sensory and Behavior.
3. Alternative **Sensory Processing Measure** (Parham et al., 2010)

Sensory Modulation Challenges P. 15

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1. **Sensory Modulation Disorders**-Difficulty using sensory information to functionally respond to significant environmental information and screen out irrelevant input.
 - a. **Sensory Overresponsivity**-(Sensory Sensitive/Hyper-reactivity)- Seen in over half of youth with Autism Spectrum Disorder, related to neurophysiologically heightened attention to irrelevant sensory information (Green et al., 2016) and decreased amygdala & sensory cortex habituation (Green et al., 2015). **Significantly higher incidence aggressive behavior and developmental/mental health diagnoses**
 - b. **Sensory Underresponsivity**- (Low Registration/Hypo-reactivity) do not notice sensory input, habituate quickly
 - c. **Sensory Seeking**- Actively seek out sensory stimulation, **once thought to be associated with Sensory Underresponsivity but seen in sensory overresponsivity to so structure classroom.**
 - d. **Sensory Avoiding**- Seen most often in students who experienced PTSD, try to shut down and not engage
- (Schaaf & Mailloux, 2015)**

Why & What of B. Sensory Modulation P. 16

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- **Over half of preschool kids with behavior challenges had significant sensory processing problems & higher parental stress (Silva et al., 2015)**
- **Children with PTSD have significantly more sensory processing and emotion regulation challenges (Teicher et al., 2016)**
- **Kids with abuse and neglect hx showed significant differences in sensory processing. Approximately three-quarters had tactile sensitivity if abuse hx, and underresponsive/seeking sensation if neglect (Howard et al., 2019)**
- **B. Sensory Modulation FAB Form includes Mindfulness breaks, massage, self-touch, and activities often preferred by students who have no preferred tasks**

AUDITORY HYPERSENSITIVITY P. 17

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Arousal Level



**Over-
Responsive**

Cherry Scent



**Quiet Alert
Responsive**

Apple Scent



**Under-
Responsive**

Blueberry Scent

ENERGY LEVEL

OK or Bad?



ARC
P. 18
Start at
Class/
Student's
Arousal
Level
Tolerance

FAB ENERGY LEVELS/COLORS “Scents”

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Adapted from Zones of Regulation

P. 19

**LOW
ENERGY**

*Hypo-
Responsive*

BLUE
“Blueberry”

Feel: Numb
Act: Withdraw

**MEDIUM
ENERGY**

Quiet Alert State

GREEN
“Apple”

Feel: Happy
Act: Learn



**HIGH
ENERGY**

*Hyper-
Responsive*

YELLOW
“Lemon”

Feel: Annoyed
Act: Scream



**VERY
HIGH ENERGY**

*EXTREMELY
HYPER-
RESPONSIVE*

RED
“Cherry”

Feel: Mad
Act: Hit



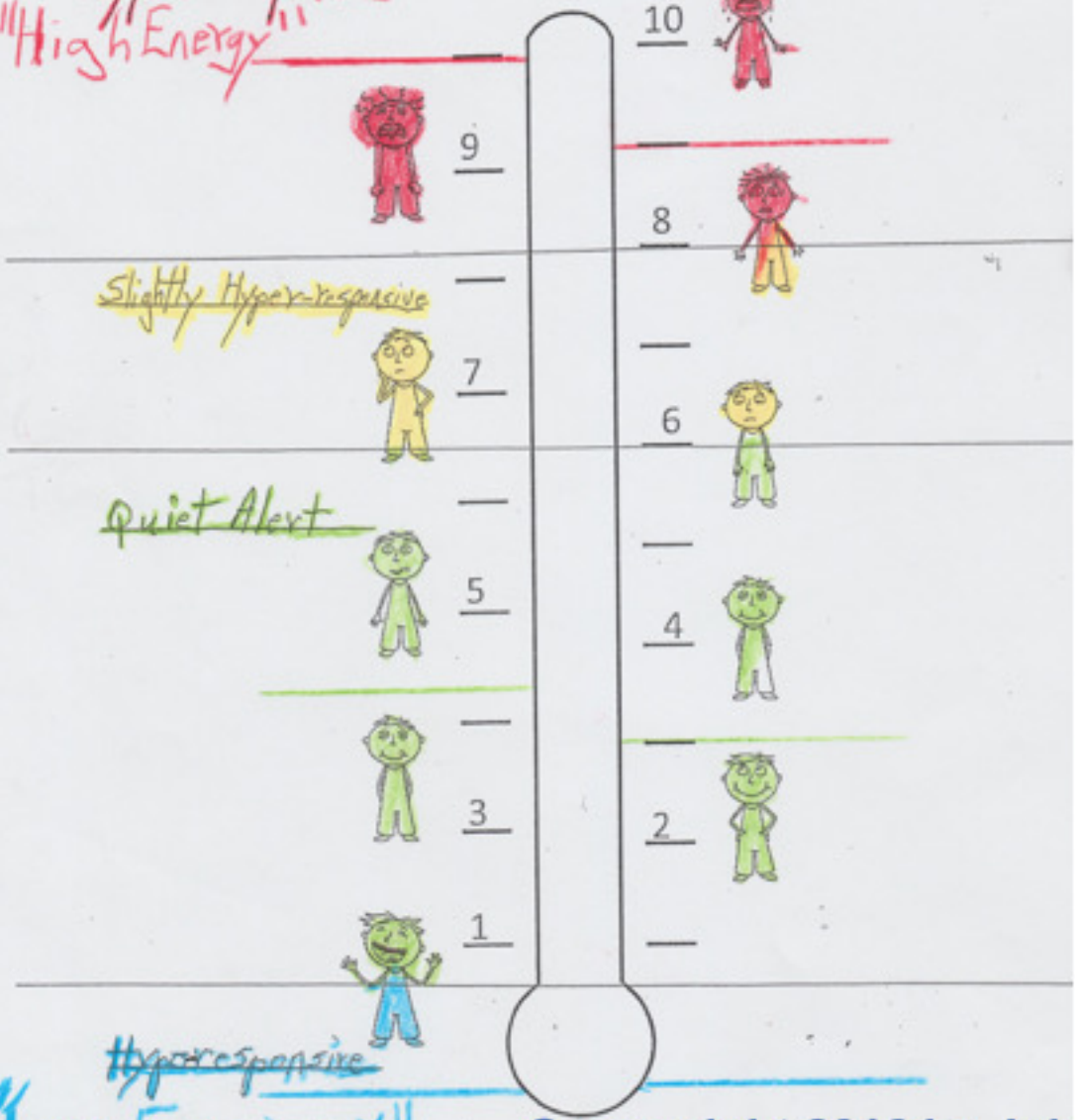
ENERGY LEVEL

How Are You Feeling Today?

FEELINGS

ACTIONS

Hyper-responsive
"High Energy"



Slightly Hyper-responsive

Quiet Alert

Hypersensitive
"Low Energy"

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, 2020. Movement & Movement. Richards Institute)

Teach Emotion Regulation to Decrease Behavioral Disruptions & Improve Learning P. 20

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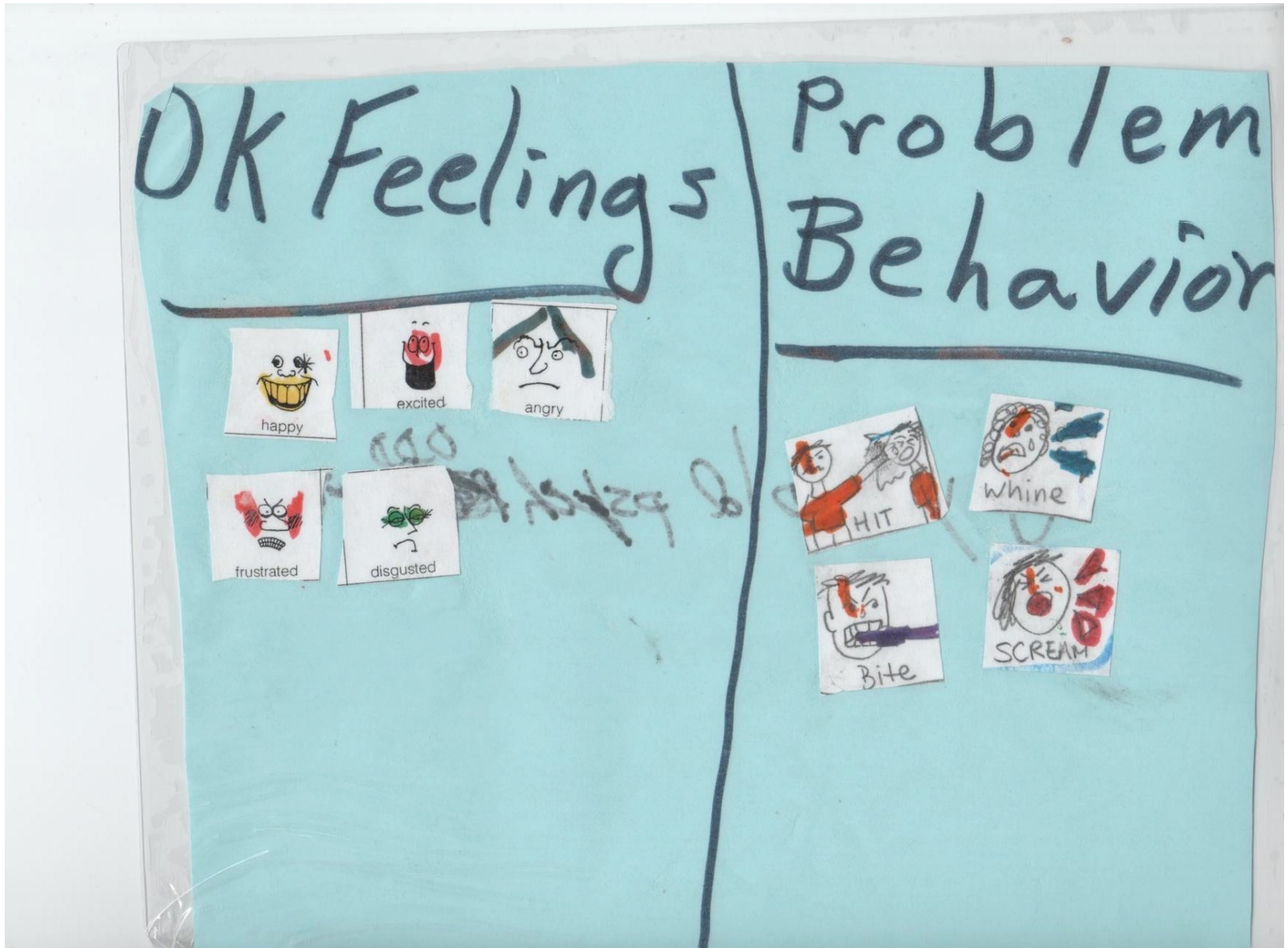
- Body Awareness & Sensory Processing skills provide the foundation for our emotions and self-regulation, and are significantly greater in youth with Autism Spectrum (DuBois et al., 2016)
- **Emotion Regulation is best taught** collaboratively by teachers and therapists **using mindfulness, coping strategies, environmental adaptations, and movement activities (Case et al., 2020).**
- **Teach students to recognize their unique early bodily & environmental triggers** for dysregulation **and individualized coping strategies** to prevent aggressive behavior (Stevens, 2019)
- **Teaching Emotion/Affect Regulation** results in evidence-based improvements in tolerating, regulating and appropriately managing emotions. Significant relationship between psychiatric disorders and poor emotion regulation (Stevens, 2019).
- Teach students about their feelings and how they relate to their arousal level and behaviors that get them in trouble

Behavioral Strategy Feeling Wheel

<https://challengingbehavior.org/?s=Feeling+Wheel>

Distinguish Feelings from Behavior P. 21

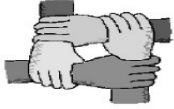
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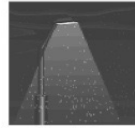
Color/Circle Your 3 Major Triggers for Misbehaving



Held/Restrained



Crowds



Darkness



Told No/Can't



A Fight with a Friend



Miss Someone



Lonely



Getting up



Hungry



Tired



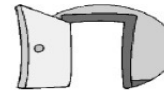
Being Bullied



Sick



Told What to Do



Door Closed/Locked

Reference: Mass. Dept. of Mental Health Safety Tool, 2009

How my body acts when I'm upset?

Color your strongest body reactions when upset

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Color/Circle 3 Major Body Triggers for Misbehaving



Crying



Red/hot face



Laughing/Silly



Threatening



Act mean/rude



Swearing



Whining



Breathe hard



Clench fists



Shake/Tics



Yelling/Screaming



Rocking



Acting Hyper



Scrunch Face



Run Away

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Color/Circle 3 Best Coping Strategies for Behaving

P. 3



Writing



Games/Toys



Drawing/Art



Tense & Relax Muscles



Warm Bath



Being Left Alone



Computer



Slow Deep Breaths



Reading



Watching TV



Count to 10



Focus bottom of feet



Rocking chair



Swings



Dancing



Sports



Swimming

Reference: Mass. Dept. of Mental Health Safety Tool, 2006

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Color/Circle 3 Best Coping Strategies for Behaving



Talk on Phone



Listen to Music



Singing/Humming



Theraband Exercises



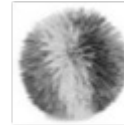
Hug Stuffed Animal



Get a Hug



Pressure Touch



Fidget



Wall pushups



Bean Bag chair



Weighted Blanket



Sit Moved on Ball



Play on Playground



Theraputty



Playdoh



Exercise



Chewey

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Color/Circle 3 Best Coping Strategies for Behaving

P. 5



Noise Cancelling Headphones



Mini-trampoline Jumping



Brushing



Pressure/Weighted Vest



Rock over Therapy Ball



Sensory Coping Area



Mindfulness Activities

Reference: Adaptation of Mass. Dept. of Mental Health Safety Tool, 2006

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P. 6



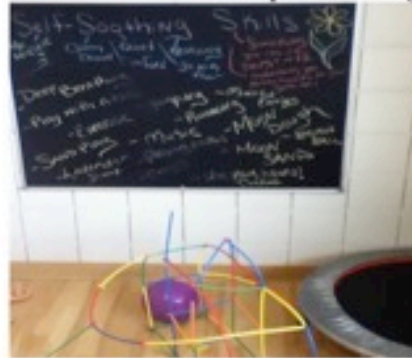
Swings



Suspended Swings



Wall Pushups



Sensory Coping Area/Room



Steam Roller Deluxe®



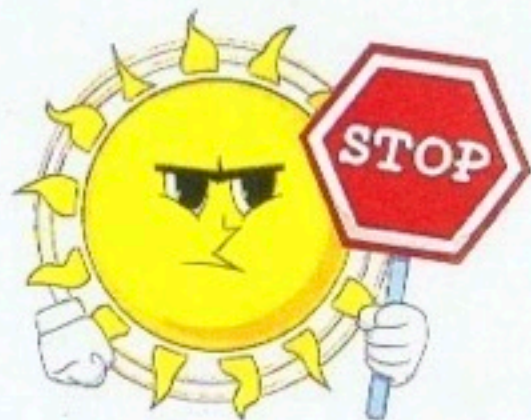
Visual Supports

Reference: Adaptation of Mass. Dept. of Mental Health Safety Tool, 2006



FAB Turtle Strategy

1. **NOTICE** Environmental & Body Triggers **STOP!!!**
2. Go to the sensory coping area.
3. Do **YOUR** individual coping strategy.
4. Later, problem-solve with help.



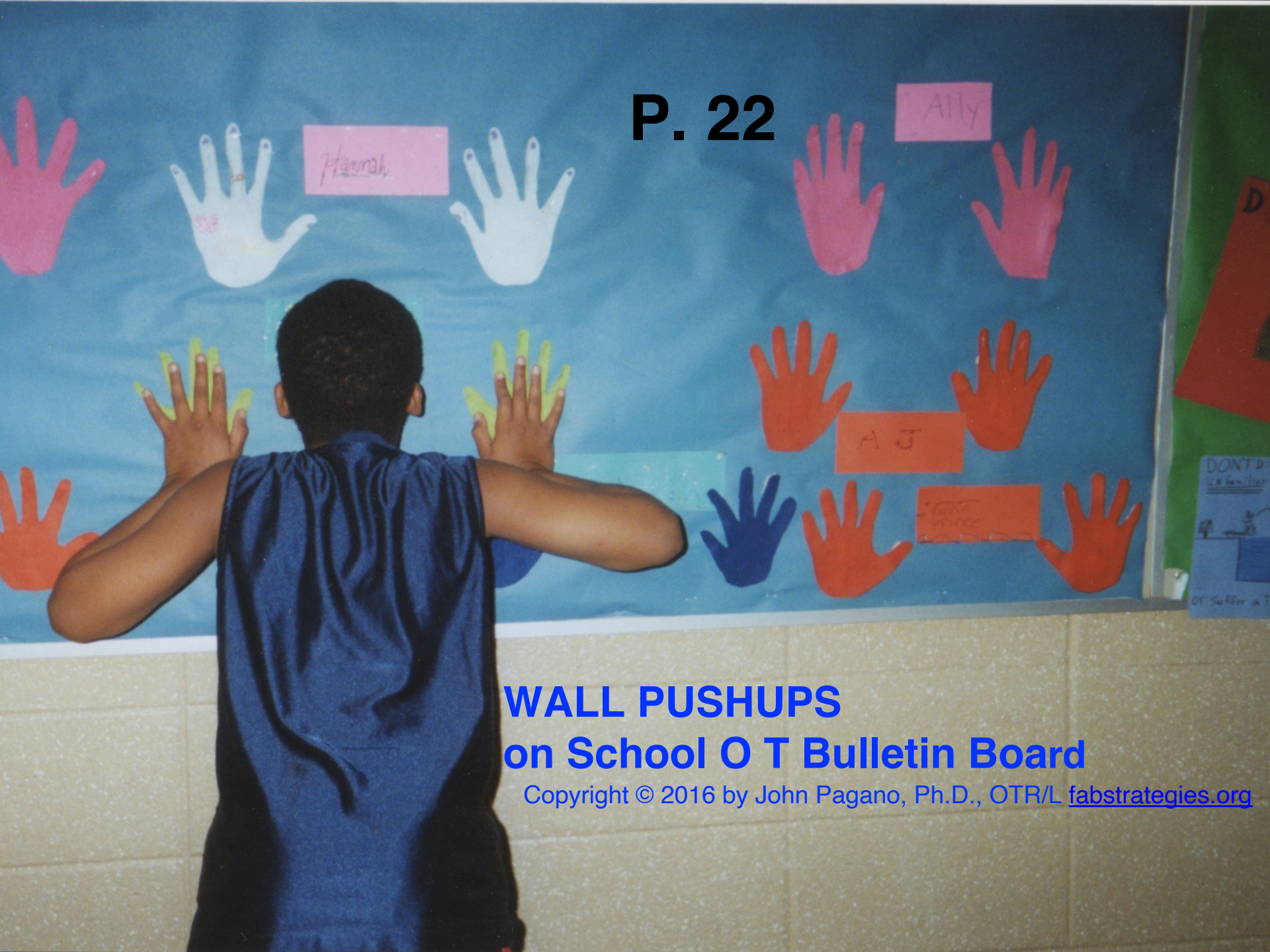
Domitrovich et al., 2013

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P. 22



WALL PUSHUPS on School O T Bulletin Board

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Mindfulness to Decrease Arousal Level

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- **4-2-4-2:** Breath counting by breathing in 4 sec., holding 2, breathing out 4, holding 2
- **4-4-6-2:** Breath counting by breathing in 4 sec., holding 4, breathing out 6, holding 2 to calm in crisis
- ***Adding movement to 4-2-4-2 and 4-4-6-2:***

While initially breathing in start with hands palms up under belly and lift gradually to palms up overhead. Breath hold remain stationary. Breathing out bring hands from palms up overhead gradually back down to palms up under belly. Breath hold remain stationary

(Brown & Gerbarg, 2022)

Breakout Room Questions

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- Introduce yourself and describe how your specific experiences & training as a teacher or therapist can help you as a complex behavioral challenges trainer?
- What is 1 new strategy I learned I can use/teach in the classroom?
- How will I start to share what I learned about improving behavior at work?
- What is my biggest barrier to using and teaching these strategies?
- What do I still want John to teach me?

Training Staff about Complex Behavior Challenges P. 23

Especially Staff who Know Nothing will Work

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- Work with their identified most difficult students, use FAB Form to record strategies & equipment given, pencil strategies to retry or try next and equipment to try next
- As consultant you can suggest and they can take it or leave it. If don't take suggestions just work with those who do.
- School staff **should not do** anything their supervisor doesn't approve of, their uncomfortable doing, or they feel is not within their professional scope of practice

Formal Trainings Boot Camp P. 24

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- **Need to know-** Talk their language at their level
- **Quickly solve staff problems**, as much as possible!!!
Give the forms, websites, adaptive equipment, for your suggestions to make it easy for them
- **Make learning fun-** Activities, Break-out groups, Stories, Videos
- **Give them stuff-** Food, coffee, adaptive equipment (fidgets, head phones), resources (Feeling Wheels, FAB forms, Trigger & Coping pictures, Sensory Coping Log), gift card or swag bag prizes
- Practice then Relax! Technology follows Murphy's Law
- Provide specific praise and baseline data showing staff how they have helped their students progress

Promoting “Team Approach” Safety P. 25

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- Use FAB Form, Functional Behavior Plan and meetings to work together as teacher, special ed teacher, administrators, OT, PT, ST, MH therapist, parent, and school nurse to address students with behavior challenges
- Identify “safe staff” who students can go to when upset
- No blame game in managing behavior
- Consultants suggest, teachers are welcome to take or not take the suggestions
- Good supervisors supervise

Mindfulness for Body Awareness

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- **Rub hands together-**
- **Trace fingers-** Pointing finger “**breathing in**” traces fingers up, “**breathing out**” trace down
- **Squeeze fingers-** Sequentially squeeze each finger alternately “breathing in” and “breathing out” when squeezing each finger
- **Circles-** feet moving then glued teach them about boundaries and personal space

(Brown & Gerbarg, 2022; Manuel, 2022)

- **Points (Visual Sticker Point) Chart-**Award points & give specific praise for positive opposite behavior and practice sessions graded points and prizes
 - Prompts: Specific statement, Calm, Close.
 - Praise: Specific, enthusiastic, touch.
 - Refuse: Calmly describe why no reward, more chances.
- **Redirection to favorite tasks-** when aggressive, young, and/or severely disabled student where could hurt others, physically redirect to a favorite activity and consequence later (LaVigna & Willis, 2012)

Activities for Students with Severe Cognitive, Visual & Auditory Challenges P. 27

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- If student has no reinforcers except food must find preferred tasks, see if attention for preferred tasks is also momentary
- **Push button twirling bead chain-** Popular as a first favorite activity, easily connected to adaptive switch. Costs \$260 and breakable. <https://enablingdevices.com/product/twirling-bead-chain/>
- **Ipad Basic Apps:** Big bang patterns <https://www.inclusivetlc.com/big-bang-patterns-app> then Mebop maestro <https://www.inclusivetlc.com/> push button music visual are often first task kids will do. Designed for students with multiple visual impairments and developmental challenges, caution Mebop maestro is marketed for infants
- **Enabling devices 702 Music box-** 4 adaptive switch tunes, \$170; durable

Pre-K & K Behavior Strategies P. 28

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- **Basic Class Rules-** 1. Safe hands 2. Polite mouth
3. Pay attention
- **Tickets** randomly reward students or class for following rules
- **Tattling must meet the 3 B's:** Bleeding, Barfing, Broken (Bullying)
- **4 Positives for every correction-**
- **Prepare and signal transitions-**
- **Priming-** Previewing environment, materials, activities
- **Preferred task-**

(Stahmer et al., 2016; Pivotal Response Treatment education.ucsb.edu/autism)

COGNITIVE FLEXIBILITY ACTIVITY

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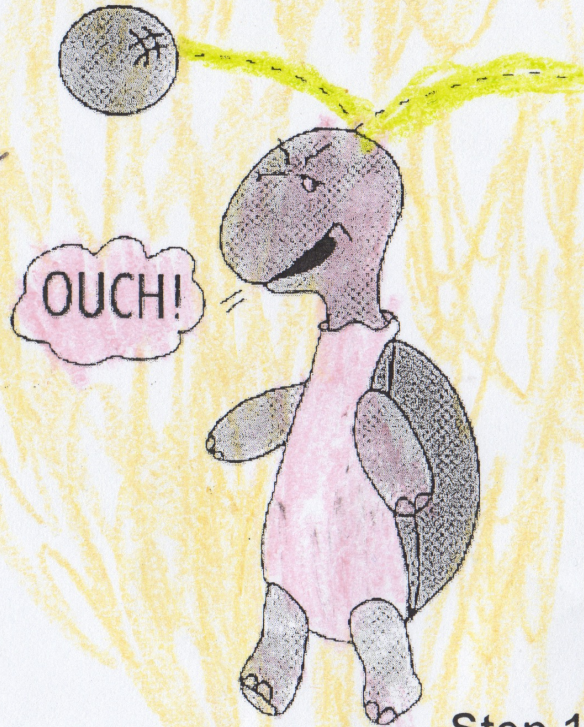
(Activity done by a student from the Teaching Tools Template Website Below)

<https://challengingbehavior.cbcs.usf.edu/Pyramid/pbs/TTYC/tools.html>

How Did Tucker Get Hit ?

He was
~~MAD~~ MAD at
Him because

He Threw
the Basketball
at Him



Step 1

Strategies that Help Prevent Aggression P. 29

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- **Priming-** Expose to new teacher, students, materials, books
- **Preferred Task-** Discover things student likes, really likes and really really likes as basis for learning and reinforcers.
- **Choice-** Limit number and options.
- **Pre-Play (Antecedent Pre-session Pairing)-** Interacting with student using favorites activity before challenging assignments for improved behavior.
- **Intersperse learned tasks-** Intersperse known/favored items with new learning for improved behavior.
- **Non-contingent Reinforcement (NCR)-** Response independent reinforcement (that can match sensory)
- **Contingent Reinforcement-** Response independent reinforcement
- **Functional Communication Training (FCT)-** Develop an alternative way for student to get the thing that he is currently using inappropriate behavior to obtain, over 75% effective in improving behavior.
- **Changing staff mindset-** Show them strategies that improve behavior, and they will come with you
- **Show resistant staff & family-** Bring data from www.pbisworld.com. or DECA Devereux assessment to administration, change behavior in school and when still misbehave at home only they may ask you for help

(Newcomb & Hagopian, 2018; Rivera et al., 2019; Pagano, 2019)

Using Clinical Reasoning & FAB STRATEGIES FORM P. 30

- 1. Pick a challenging child with behavior, developmental, and sensory processing challenges you will see Wednesday (or when you get back to work)**
- 2. Using FAB Form consider chronological age, developmental ages, and all the student's settings**
- 3. Develop one do-able life changing GOAL that will best ensure the student's success, defined as a positive opposite behavior you can baseline and achieve in the current setting with current resources by the end of the year**
- 4. Choose at least one strategy from Section A, B, C, and D; add resource websites**
- 5. Circle any equipment you plan to give**
- 6. When directed, you will be placed in breakout rooms to share and get coaching on your plan**

Pivotal Response Training/Teaching (PRT) P. 31

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- **Pivotal Response Training (PRT)**- Applies ABA to improve class engagement by developmentally addressing the pivotal skills of motivation, generalization, & social skills.
- PRT appears to improve behavior in hyper-responsive children with Autism by decreasing Thalamus & Hippocampus activation of the Cortex while improving attention and behavior
- **Reinforce effort in natural context**- When child tries shows good effort in trying to say (or says) “swing” you push the swing.
- **Embed reward in interaction**- Jump with student
- **Dr. Lynn Koegel on Supernanny**
<https://www.youtube.com/watch?v=oYQ0R6pSFGE>
- Sensory systematic desensitization- Progressive exposure to anxiety producing situations paired with mindfulness, game or snack. Can use sensory match, if skill missing address that first

(Ventola et al., 2014)

Student's Name _____ Date: _____

Behavior: _____ Respondent: _____

QUESTIONS ABOUT BEHAVIORAL FUNCTION (QABF)

Rate how often the student demonstrates the behaviors in situations where they might occur. Be sure to rate how often each behavior occurs, not what you think a good answer would be.

X = Doesn't apply 0 = Never 1 = Rarely 2 = Some 3 = Often

Score	Number	Behavior			
	1.	Engages in the behavior to get attention.			
	2.	Engages in the behavior to escape work or learning situations.			
	3.	Engages in the behavior as a form of "self-stimulation".			
	4.	Engages in the behavior because he/she is in pain.			
	5.	Engages in the behavior to get access to items such as preferred toys, food, or beverages.			
	6.	Engages in the behavior because he/she likes to be reprimanded.			
	7.	Engages in the behavior when asked to do something (get dressed, brush teeth, work, etc.			
	8.	Engages in the behavior even if he/she thinks no one is in the room.			
	9.	Engages in the behavior more frequently when he/she is ill.			
	10.	Engages in the behavior when you take something away from him/her.			
	11.	Engages in the behavior to draw attention to himself/herself.			
	12.	Engages in the behavior when he/she does not want to do something.			
	13.	Engages in the behavior because there is nothing else to do.			
	14.	Engages in the behavior when there is something bothering him/her physically.			
	15.	Engages in the behavior when you have something that he/she wants.			
	16.	Engages in the behavior to try to get a reaction from you.			
	17.	Engages in the behavior to try to get people to leave him/her alone.			
	18.	Engages in the behavior in a highly repetitive manner, ignoring his/her surroundings.			
	19.	Engages in the behavior because he/she is physically uncomfortable.			
	20.	Engages in the behavior when a peer has something that he/she wants.			
	21.	Does he/she seem to be saying, "come see me" or "look at me" when engaging in the behavior?			
	22.	Does he/she seem to be saying, "leave me alone" or "stop asking me to do this" when engaging in the behavior?			
	23.	Does he/she seem to enjoy the behavior, even if no one is around?			
	24.	Does the behavior seem to indicate to you that he/she is not feeling well?			
	25.	Does he/she seem to be saying, "give me that (toy, food, item)" when engaging in the behavior?			
	Attention	Escape	Non-social	Physical	Tangible
	1. Attention <input type="checkbox"/>	2. Escape <input type="checkbox"/>	3. Self-stim <input type="checkbox"/>	4. In pain <input type="checkbox"/>	5. Access to items <input type="checkbox"/>
	6. Reprimand <input type="checkbox"/>	7. Do something <input type="checkbox"/>	8. Thinks alone <input type="checkbox"/>	9. When ill <input type="checkbox"/>	10. Takes away <input type="checkbox"/>
	11. Draws <input type="checkbox"/>	12. Not do <input type="checkbox"/>	13. Nothing to do <input type="checkbox"/>	14. Physical problem <input type="checkbox"/>	15. You have <input type="checkbox"/>
	16. Reaction <input type="checkbox"/>	17. Alone <input type="checkbox"/>	18. Repetitive <input type="checkbox"/>	19. Uncomfortable <input type="checkbox"/>	20. Peer has <input type="checkbox"/>
	21. "Come see" <input type="checkbox"/>	22. "Leave alone" <input type="checkbox"/>	23. Enjoy by self <input type="checkbox"/>	24. Not feeling well <input type="checkbox"/>	25. "Give me that" <input type="checkbox"/>
	Total	Total	Total	Total	Total

Integrate QABF with Sensory Treatment P. 32

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- **QABF (Questions About Behavior Function)**- Apply the function of the behavior in challenging treatment planning. If ESCAPE use Break signal, Antecedent Pre-session pairing, & Intersperse learned tasks to help with disliked tasks. If NON-Social (sensory) function provide NCR you think matches the function of repetitive problematic behavior. If ATTENTION, ESCAPE, TANGIBLE or PHYSICAL use FCT to teach appropriately requesting these things.
- Integrate QABF with Sensory Profile to develop treatment integrating sensory and behavioral needs (Lane, 2020; Lydon et al., 2017; Pingale et al., 2019)

(Kelly et al., 2015; Rivera et al., 2019)

13 yr. old = ASD, ODD & Attachment Disorder;
 Student's Name: Definite Difference Date: SP-Low Reg & Sensory seeking
 Behavior: Head banging against the floor Respondent: John Pagano, PhD, OTR/L

QUESTIONS ABOUT BEHAVIORAL FUNCTION (QABF)

Rate how often the student demonstrates the behaviors in situations where they might occur. Be sure to rate how often each behavior occurs, not what you think a good answer would be.

X = Doesn't apply 0 = Never 1 = Rarely 2 = Some 3 = Often

Score	Number	Behavior		
0	1.	Engages in the behavior to get attention.		
0	2.	Engages in the behavior to escape work or learning situations.		
3	3.	Engages in the behavior as a form of "self-stimulation".		
1	4.	Engages in the behavior because he/she is in pain.		
0	5.	Engages in the behavior to get access to items such as preferred toys, food, or beverages.		
0	6.	Engages in the behavior because he/she likes to be reprimanded.		
0	7.	Engages in the behavior when asked to do something (get dressed, brush teeth, work, etc.		
3	8.	Engages in the behavior even if he/she thinks no one is in the room.		
2	9.	Engages in the behavior more frequently when he/she is ill.		
0	10.	Engages in the behavior when you take something away from him/her.		
0	11.	Engages in the behavior to draw attention to himself/herself.		
0	12.	Engages in the behavior when he/she does not want to do something.		
2	13.	Engages in the behavior because there is nothing else to do.		
1	14.	Engages in the behavior when there is something bothering him/her physically.		
0	15.	Engages in the behavior when you have something that he/she wants.		
0	16.	Engages in the behavior to try to get a reaction from you.		
0	17.	Engages in the behavior to try to get people to leave him/her alone.		
3	18.	Engages in the behavior in a highly repetitive manner, ignoring his/her surroundings.		
1	19.	Engages in the behavior because he/she is physically uncomfortable.		
0	20.	Engages in the behavior when a peer has something that he/she wants.		
0	21.	Does he/she seem to be saying, "come see me" or "look at me" when engaging in the behavior?		
0	22.	Does he/she seem to be saying, "leave me alone" or "stop asking me to do this" when engaging in the behavior?		
3	23.	Does he/she seem to enjoy the behavior, even if no one is around?		
1	24.	Does the behavior seem to indicate to you that he/she is not feeling well?		
0	25.	Does he/she seem to be saying, "give me that (toy, food, item)" when engaging in the behavior?		
Attention	Escape	Non-social Sensory	Physical	Tangible
1. Attention <input type="checkbox"/>	2. Escape <input type="checkbox"/>	3. Self-stim <input type="checkbox"/>	4. In pain <input type="checkbox"/>	5. Access to items <input type="checkbox"/>
6. Reprimand <input type="checkbox"/>	7. Do something <input type="checkbox"/>	8. Thinks alone <input type="checkbox"/>	9. When ill <input type="checkbox"/>	10. Takes away <input type="checkbox"/>
11. Draws <input type="checkbox"/>	12. Not do <input type="checkbox"/>	13. Nothing to do <input type="checkbox"/>	14. Physical problem <input type="checkbox"/>	15. You have <input type="checkbox"/>
16. Reaction <input type="checkbox"/>	17. Alone <input type="checkbox"/>	18. Repetitive <input type="checkbox"/>	19. Uncomfortable <input type="checkbox"/>	20. Peer has <input type="checkbox"/>
21. "Come see" <input type="checkbox"/>	22. "Leave alone" <input type="checkbox"/>	23. Enjoy by self <input type="checkbox"/>	24. Not feeling well <input type="checkbox"/>	25. "Give me that" <input type="checkbox"/>
Total 0	Total 0	Total 13	Total 6	Total 0

Sensory Automatic

Challenging Special Needs Discipline P. 34

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- ★ **Preferred, Developmentally Appropriate Curriculum-**
Assure curriculum area is a preference for and at the students developmental level
- ★ **Sensory match-** intervention can improve school learning in children with Autism Spectrum Disorders. When FBA using QABF finds function of behavior is nonsocial (sensory), through preference assessment NCR that meets sensory needs and motivates student.
- ★ Individualized antecedent use of the Movement Break and Sensory Match Strategy can improve school attention and learning in children with Autism Spectrum Disorders
- ★ Give greater or more immediate reinforcement for tasks done independently rather than assisted, and verbal rather than sign language **responses**

Daily & Dysregulated Coping Cards P. 36

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Daily Coping Skills



Listening to music



Drawing/Art



Hug Stuffed Animal

Emergency Skills



Swimming



Chewey



Wall Pushups

Bully Proofing Students with Special Needs P. 37

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- Provide higher functioning children with a sensory anchor (feel your feet/palms) and gradually train them to use this anchor for calming when trigger physical reactions or situations begin, then reinforce them.
- Social Skills Autism Groups-(Laugeson, 2014)
- Physical bully proof-Practice differentiating. Avoid the bully, Don't: Police the bully, Call attention to yourself around him, befriend him, use teasing comebacks. Do: Hang out with other people, stay near an adult when the bully is around, only if people are in danger tell an adult privately.
- Verbal bully proof-Teasing only. With no emotion say, "Whatever"; Anyway; Yeah and; So what; who cares", short practiced teasing come backs, then walk away
- Great teen program for social skills I've used

(Ref: UCLA Peers Clinic www.semel.ucla.edu/peers)

Sequential: Drawing P. 38

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- **Diagonal-**
- **X-**
- **Alternate infinity I-**
- **Infinity-**
- **Infinity visually track-**
- **Pre twist-**
- **Elbow I-**
- **Post twist-**
- **Symmetry-**

Cognitive Disabilities Strategies P. 39 for Students & Parents

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- ***Plan-Do-Review, Aerobic exercise, and mindfulness*** help improve executive functions for behavior and body image.
- **Cognitive Disability Teaching Strategies for PARENTS and students:** *Embed time in schedule, change positions if stuck, don't walk and talk, results not morals.*
- Always involve administrators in potentially problematic parent conversations.
- Tell the truth although it may hurt.

Students with PTSD

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- **Developmental Trauma-** Neurological, behavioral, sensory processing, and emotion regulation challenges are significantly more likely in students who experience early child abuse & neglect (Teicher et al., 2016; Blaustein & Kinniburgh, 2019)
- Children and family members can experience PTSD in response to NICU, PICU, and other prolonged or severe hospitalizations (Stenman et al., 2019)
- Higher rates of PTSD in parents and care givers of children with severe acute and chronic illness (Carmassi et al., 2017)
- Developmental Trauma Tx experienced OT SI, ARC, & PRT

Trauma-Informed Teacher/Therapist P. 40

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Assume all students may have PTSD and low frustration tolerance so consistently use trauma-informed strategies with all students:

- **Invite not command: (Participate, Close eyes); Still like you (despite rewarding & consequences for behavior so students succeed); Ask permission to kid with and touch; Choices; Priming (Orient to environment, class, books before teach); Before lessons & in treatment: Facilitate a calm alert state (sensory modulation), minimize sensory distractions; lower stress level to moderate or less; facilitate body awareness and an organized sensory and interoceptive state (Sensory Discrimination); and address Emotion Regulation for learning.**

(Blaustein & Kinniburgh, 2019)

Sequential: Orienting

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- Turn head from the left side to the right
- Notice anything red, square, made of wood
- How many people in the room?
- Repeat keeping head center and moving eyes
- For trauma informed teaching this movement break gets students to the room they will be working in and may have positive impacts related to EMDR (Eye Movement Desensitization and Reprocessing)



Sequential Bilateral Integration

Same Half: Raising the right shoulder, left ankle, and left shoulder half way up

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Checkout Sensory Profile Uses

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1. **Sensory Profile** is a standardized, norm-referenced assessment of significant sensory modulation differences. Can redo to monitor sensory changes but not to assess effectiveness of intervention
2. Can assess with Sensory Profile : **Infant/Toddler, (2-5 years)**, Class (5-12), Adolescent/Adult (12 and older) **Short Form (1999)**, **Short Form 2 (2014)** that differentiates total Sensory and Behavior.
3. Alternative Sensory Processing Measure (Parham et al., 2010)
4. FBA (QABF) and Sensory Profile for challenging behavior
5. **Winnie's view of treatment:** Can coach parents and student's to compensate for their sensory style, Dr. Gil Foley for parent-child interactions

C. Positive Behavior Support Strategies

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Ask permission to *Kid-Touch*/Prompt head filter/Invite/Still like you/Facing door/Grounding

Conditioned calm/*Mand-Break*/Sensory match-Coaching/Desensitization/Practice saying/Redirection

Pre-correction/Self-management/Tolerance for delay/Coping card/FAB turtle/Humor/Partial sentences

Preferred: Tasks/Distractor/Choices/Pre-play before work/Intersperse learned tasks/Priming/Prompts

Reinforce: *Good attempt-Appropriate-Point chart-Tangible-Desensitization-Self-management*

SENSORY DISCRIMINATION DISORDERS & TX Strategies

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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 interoception sensory input e.g., hunger (Miller & Collins, 2012; Watling et al., 2011)

- **Tx-Deep pressure touch, Awareness of front-back, top-bottom of body through movement, obstacle courses, touch.**
- **SBIs are individualized environmental & sensory strategies to improve behavior by addressing sensory modulation and sensory discrimination challenges (Watling et al., 2011). SBIs are a component of evidence-based PBIS, Floortime for ASD (Hess, 2013), Collaborative Problem Solving for ODD (Pollastri et al., 2013), & SMART approach for PTSD (Warner et al., 2014)**

ACADEMIC TRANSFER OF BACK/FRONT, TOP/BOTTOM, SIDE TO SIDE

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(Burpee, 2019)

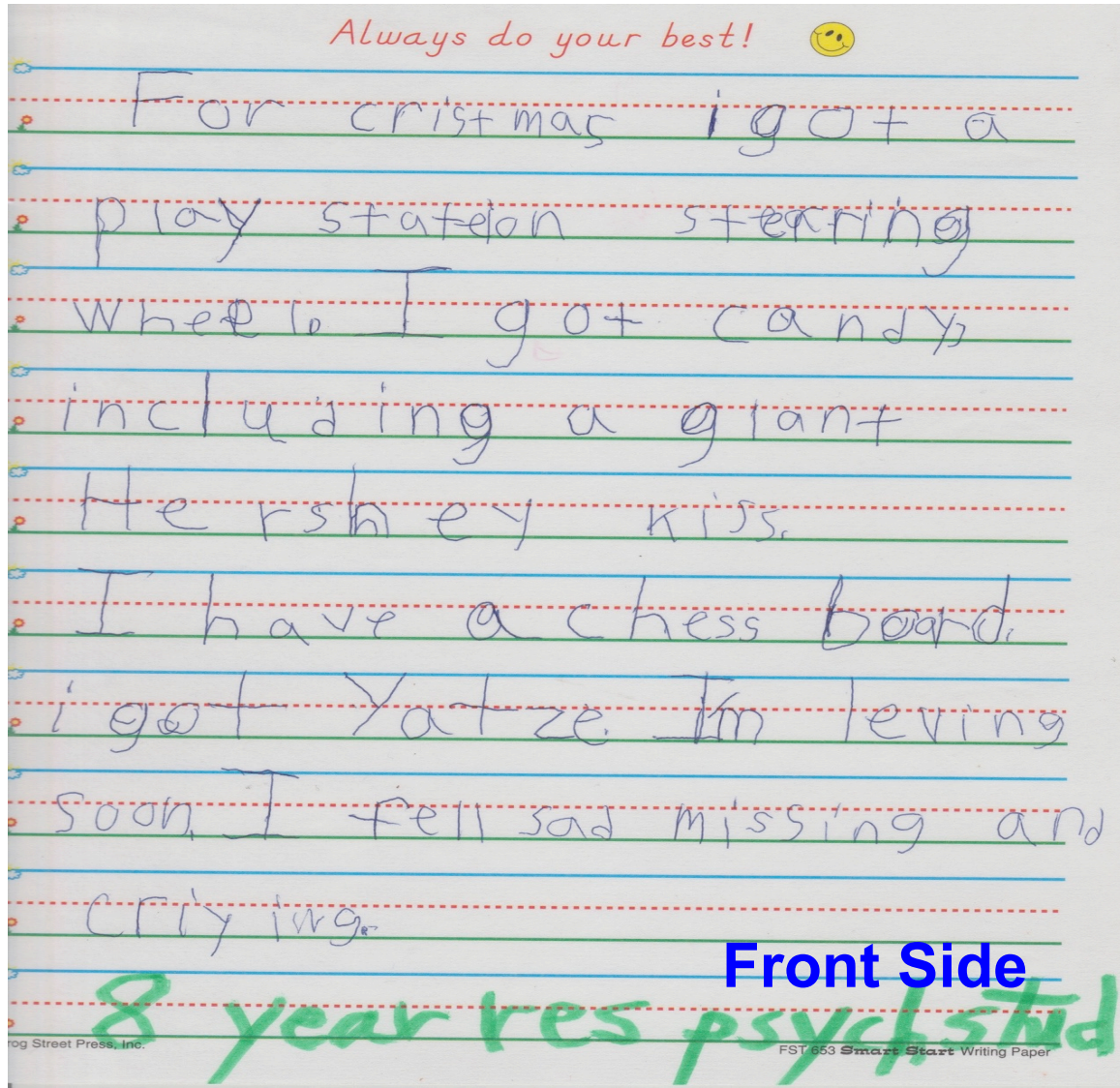
**SIDE TO
TOP DOWN**

DOWN

DOWN

**DOWN TO
BOTTOM**

STOP



SIDE

BODY SCHEME-Sensory Discrimination Disorder

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Team Members Roles in Complex Behavior

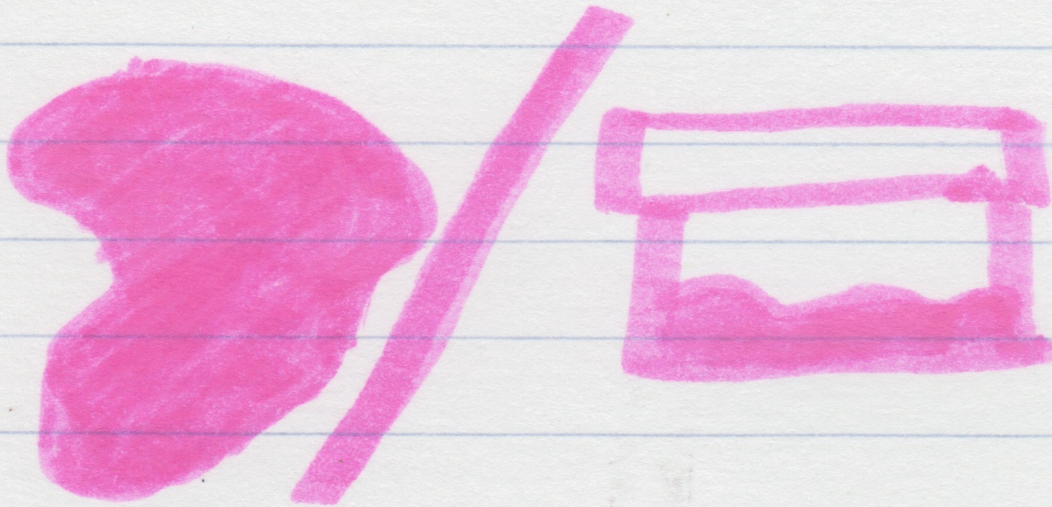
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- Mental Health Therapists- Guidance Counselor & School SW; School Psychologist; BCBA's "Functional Behavioral Analysis/Plan"
- Speech Language Pathologist- Communication, language, visual supports, auditory processing screening
- Occupational Therapist- usually part-time, trained in physical and mental health activities and functional skills
- Physical Therapist- Usually part-time, gross motor, wheelchairs, splints
- School nurse- medically fragile, somatic complaints, school avoidant, cutters, mental health concerns
- Special Education Teachers- Resource rooms, special education classrooms, "Coordinator of Chaos"
- Regular Education teacher- does everything (includes education & reading specialists)

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.



FAB Strategies® to Improve Self-Control Form

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Client: Repeated physical and verbal aggression and vulgar language; Definite difference in Behavioral, Sensory Avoiding, and Sensory Sensitivity; Autism Spectrum Disorder with Intellectual Impairment, ADHD & Bipolar Disorder

Therapist: John Pagano, Ph.D., OTR/L **Contact** John.Pagano@ct.gov

Functional Goals: Increased safe hands **Dates:** 8/15/17

A. ENVIRONMENTAL ADAPTATION

Sensory coping area/Prepare-Limit-Transitions/Low noise/Calm face/Headphones (demonstrate on self)

Staff removal of cell phones and glasses as they can be triggers/Slow: Speech-Pace

Environmentally avoid & lower demands when in stimulating environments, as it can increase aggression

Visual: List/Choice of 1 activity from 1 choice; do 2 minutes minimum; clean up before next activity

B. SENSORY MODULATION

Energy level-Colors-Scents/Triggers: Event-Body/Coping strategies

Decrease, then if needed very gradually increase, sensory input/Increase: Structure-Response time

Theraputty/Playdoh/ Sit on therapy ball move: Up & down

Touch vibration: Back/Shoulders Squeeze-Press/Roll therapy ball on-Core progression

C. POSITIVE BEHAVIOR SUPPORT

Breaks: Music-Movement/Choices/Preferred tasks/Intersperse learned tasks

Priming/Verbal-Visual Mand: Verbal break: “All done”

Pre-Correction/Humor/Desensitization/Redirection to a favorite activity in a low stimulation room

Reinforce: Attempts-Individual attention-Tangible favorites: yogurt, sherbert, music

D. PHYSICAL SELF-REGULATION

Walk/Basketball/Dance/Balance beam: Forward & Back-Sideways/Coloring with scented markers

Jump on a mini-trampoline/Foam ball: Catch, saying “1, 2, 3 go before throwing/Sweeping the floor

www.challengingbehavior.org www.spdstar.org <http://www.autismprthelp.com/>

References: Domitrovich et al., 2013; Koester, 2012; LaVigna & Willis, 2012; Stahmer et al., 2011

SENSORY BASED MOTOR DISORDERS

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3. Sensory Based Motor Disorders

A. Dyspraxia-sensory integration difficulties resulting in problems planning and doing non-habitual skilled motor tasks (Schaaf & Mailloux, 2015). More common in PDD, predicting difficulties in social, imitation (Dzuik et al., 2007), sensory processing, language, & behavior skills (Lane et al., 2010). Sig greater SI and praxis problems in Sx (Chan et al., 2009) and Child neglect (Bauer et al., 2009). Praxis:

- a. Ideation-Know what want to do**
- b. Motor Planning-Steps/sequence**
- c. Execution-Act**

B. Postural Disorders- Dynamic balance difficulties (seen in sensory motor “soft signs”)

FAB Pressure Touch Research

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- Qigong Sensory Treatment with Autism Spectrum Disorders (ASD) resulted in significantly improved behavior, language, and sensory modulation regardless if hyper-responsive, hypo-responsive, or both in preschoolers (Bodison & Parham, 2018) and 6-12 year olds (Silva et al., 2013)
- Shoulder squeeze and massage significantly improved mood in half of 8 case study youth with Autism and Intellectual Disabilities (Bestbier & Williams, 2017)
- Literature reviews found moderate pressure massage has the greatest research support for reducing behavior problems, 3 months tx twice weekly for 15 min. (Yunus et al., 2015)
- Deep pressure touch was perceived as calming whether done through touch or mechanical input, activating the insula in distinct yet similar ways from light interoceptive touch (Case et al., 2021)

Pagano FAB Sensory Functional Behavioral Analysis

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Using a Functional Behavioral Analysis increases success 50-90% depending on how well followed, but still expected to work as initially written only one-third of the time, and if works likely to have extinction burst where they get worse before they get better.

ABC Sensory and Functional Behavioral Analyses- e.g. 1 Developmentally disabled, non-verbal 4-year old integrated in a very loud Head Start class screams whenever the teacher is not giving her individual attention. After the child screams the teacher runs over and immediately gives her individual attention.

Sensory-
Antecedent-
Behavior-
Consequences-
Function-

e.g. 2 Kindergartener with typical intelligence who has ADHD and ODD diagnoses runs away when directed to come in from the playground for nap time, and teacher runs after and if lucky grabs the child before he runs out the front door of the school into the street (where police man gets him).

Sensory-
Antecedent-
Behavior-
Consequences-
Function-

B. Assess function or communication of the behavior-Form is how it looks (hitting, biting, spitting) function is what the behavior communicates and the purpose it serves. In young children:

To get out of something-

To get something-

∞ Dream Team Task 1 Determine Target Behavior, SABC, and function of the behavior

C. Can try all the teaching and behavior modification strategies you know plus:

1. Altering the antecedent-Change the antecedent to eliminate or reduce the need

2. Developing or Strengthening the relationship between an appropriate behavior and the desired consequences-

3. Eliminating or Weakening the relationship between the inappropriate behavior and the reinforcing consequences-

∞ Dream Team Task 2 Determine Target Behavior, SABC, and function of the behavior

e.g. 1 Strategies to transform the behaviors of child so she participates appropriately and never screams-

e.g. 2 Strategies to transform the behaviors of child so he follows directions well and never runs out of class

SENSORY PROCESSING 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

0 1 2 3 4 5

HYPERRESPONSIVE

Sensory Sensitive

Quiet Alert State

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

**HYP0-
RESPONSIVE**

Low
Registration

Quiet
Alert
State

**HYPER-
RESPONSIVE**

Sensory
Sensitive

Managing Significant Sensory Modulation Differences

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SENSORY BASED MOTOR DISORDERS

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3. Sensory Based Motor Disorders

A. Dyspraxia-sensory integration difficulties resulting in problems planning and doing non-habitual skilled motor tasks. More common in PDD, predicting difficulties in social, imitation, sensory processing, language, & behavior skills. Sig greater SI and praxis problems in Schizophrenia and Child neglect.

Praxis:

- a. Ideation-Know what want to do**
- b. Motor Planning-Steps/sequence**
- c. Execution-Act**

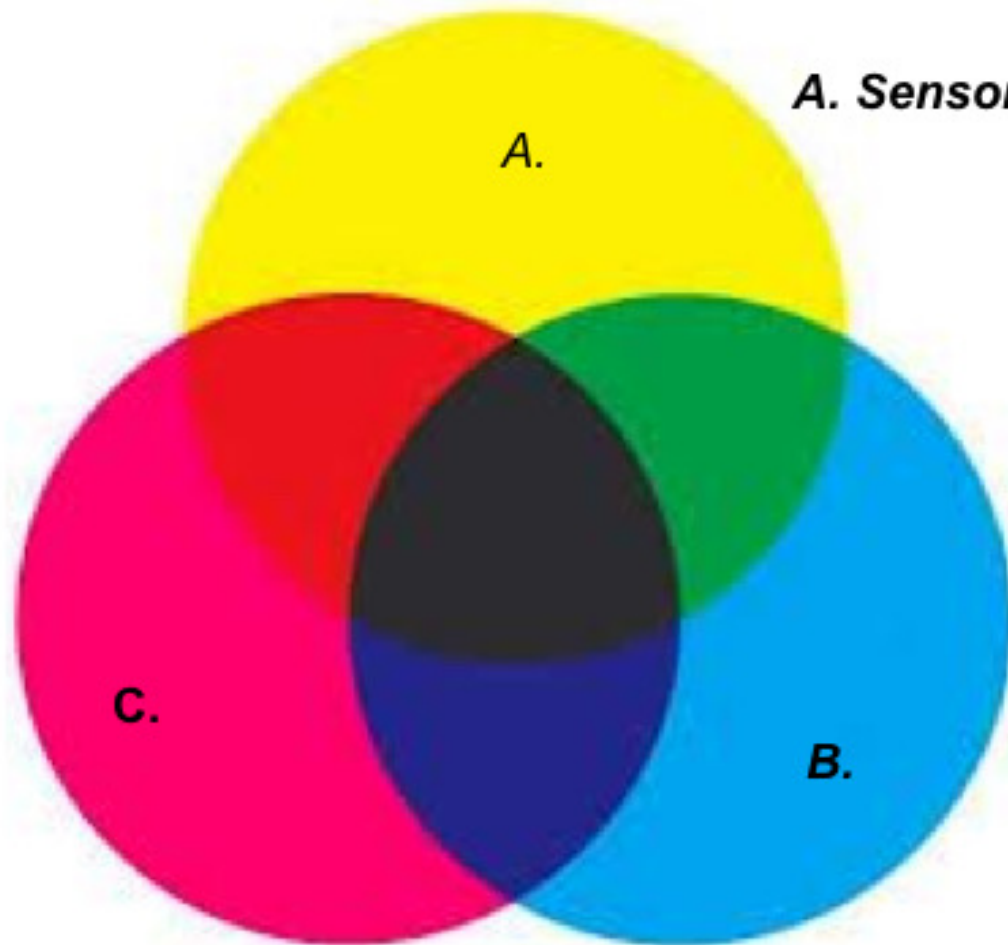
B. Postural Disorders- Dynamic balance difficulties (seen in sensory motor “soft signs”)

(Schaaf & Mailloux, 2015)

Interactions Between the Categories of Sensory Processing Disorder

www.fabstrategies.org

Reference: (Miller et al., 2007)



A. Sensory Discrimination Disorders

C.

B.

C. Sensory Modulation Disorders

B. Sensory Based Motor Disorders

PROGRESSIVE SENSORY-BASED INTERVENTION

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

FAB SENSORY COPING AREA LOG

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Child: _____
Staff: _____
Date: _____ Time: _____
Sensory quiet area use suggested by: Child _____ Staff _____

Circle Entering Level of Upset

1 2 3 4 5 6 7 8 9 10
CHILLIN Medium Angry **AGGRESSIVE**

Behavior before comfort room use: _____

Environment (Check items used)

Dim lighting _____ *Pup tent* _____
Noise canceling head phones _____
Weighted blanket _____ Weighted vest _____ Weighted shawl _____
Bean Bag Chair _____
Music _____ *Programs/CDs:* _____
Lycra pressure vest _____
Rocking Chair _____ *Body Sox* _____
Aromatherapy _____ *Scent:* _____
Other _____

Activities (Check items used)

_____ *Decrease then graded increase sensory-Increase structure-Speak slow-Calm face*
_____ *Stretch: Up-Side-Twist-Down-Forward*
_____ *Nose breathe-Out: double in fist thumb-Tense & relax*
_____ *Pushups: Wall-Knee-Marine wall-Regular*
_____ *Theraband-Exercise tubing: Forward, Down, Cross Midline*
_____ *Self brushing-Isometrics: Up & Down-Center-Down*
_____ *Talk with staff-Specific peer-Telephone family*
_____ Steam roller deluxe Time in up to: _____
_____ *Favorite Toys Type* _____
_____ *Therapy putty-Wiki Stix-Crafts Type:* _____
_____ *Fidget-Vibrating toys Type:* _____
_____ *Therapyball: Bounce seated-Push ups-Rock on hands-Wheelbarrow walk*
_____ *Chewey Type* _____
_____ *Mini-trampoline jumping-Punch heavy bag*
Other _____

1 2 3 4 5 6 7 8 9 10
CHILLIN Medium Angry **AGGRESSIVE**

Behavior after comfort room use: _____

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FAB Strategies® Pre-K & Kindergarten Form
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X-Therapist ✓-Staff & family A-Attachment Circle-Equipment given

Client: _____ Therapist: _____ Contact _____
Functional Goals: _____ Dates: _____

A. ENVIRONMENTAL ADAPTATION

- ___ Sensory coping area/Prepare-Limit-Transitions/Low noise/Headphones/Fidget-Comfort Box-Bag
- ___ Pencil grip/Desk: *Stable-Separate-Near teacher-Carrel-Clipboard-Slant board-Disk-'O'-Sit*
- ___ Visual: *List-Schedule-If then-Schedule story-Calm face/Slow: Speech-Pace*
- ___ Choice of 1 activity from 1 2 3 4 choices; do ___ minutes minimum; clean up before next
- ___ **Ear Press/Weighted-Blanket-Pressure-Vest/Chewy**

B. SENSORY MODULATION

- ___ Move: *Head-Shoulders-Hip circles/Tense & relax/Breathing: Hand-Bird-Mindful clock-Paint*
- ___ Self-touch: *Head-X hands shoulder squeeze-Arms-Legs-Toes/Energy ball/Kindness*
- ___ Arousal levels-Modulate/Freeze dance/Simon says/Giant steps/Deliver: *Books-Messages-Box*
- ___ Touch: *Beans-Rice-Therplast-Playdoh-Sand-Kinetic Sand-Floof-Water-Glue-Shaving cream*
- ___ Vibration-Brushing: *Back-Arms/Head crown/Shoulders: Squeeze-Press/Spine roll/Back X*
- ___ **Supported sitting therapy ball: Forward & back-Up & down-Sides-Mindful clock**
- ___ **Roll therapy ball-Core-Breathe/Deep pressure/Back tech: Press-Tap**

C. POSITIVE BEHAVIOR SUPPORT

- ___ Ask permission to kid-Touch/Prompt speech filter in head/Invite/Still like you/Orienting/Redirect
- ___ Practice say/Coping card/FAB turtle/Humor/Tolerance for delay/Desensitization/Partial sentence
- ___ Preferred task/Choices/Mand-Break/Intersperse learned/Priming/Prompts/Conditioned calm
- ___ Reinforce: *Good attempt-Appropriate-Point chart-Tangible/Sensory match/Social role-playing*

D. PHYSICAL SELF-REGULATION

- ___ Push Wall-Wall pushups/Prone on therapy ball: *Hands rock-Wheelbarrow walk/Mini-trampoline*
- ___ Hand: *Both to knees-Same side knee-Opposite knee/Draw: Diagonals-X-Infinity-Barrier circle*
- ___ Ball: *Wall-Letter-Quadruped pass-Bat/Beanbag pass/Playground-Structure/Exercise band*
- ___ **Crash Pad/Scooter board: Pull-Push/Suspended Swing: Forward-Back-Lateral-Spin-Target**
- ___ Activities: _____
- ___ Activities: _____

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Parent/guardian Signature Supporting Program: _____

Pagano FAB Preschool Child Care Discipline Policy

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Discipline Policy Foundational Beliefs:

Discipline helps a child learn to value his or her self and develop good self-discipline and social skills. Discipline is best accomplished as a collaborative endeavor involving the individual child, family, and childcare staff. Good discipline is compassionate, caring, sensitive teaching to manage conflict and strong feelings. Good discipline helps children accept that they and others are good people who sometimes make mistakes. Our childcare program is committed to using discipline to teach children the inherent self-worth of themselves and others as the foundation for life long success. Consistent with our beliefs about discipline and current research positive reinforcement strategies are regularly implemented with all children (Bailey & Wolery, 1992).

This Child Care Discipline Policy shall be:

- a. Taught annually to all staff
- b. Agreed to, signed, and learned by all new staff upon employment
- c. Agreed to and signed by all parents upon their child entering the program
- d. Posted in each classroom

(Division for Early Childhood, 1999)

Accepted Disciplinary Practices of Positive Reinforcement Consistently Implemented with all Children:

1. Child care staff will establish a positive relationship with every child
2. Developmentally appropriate preferred activities and choices will be used
3. Communication, language, and social skills will be taught and reinforced
4. Classrooms and play areas will be structured and maintained to promote self-control, including use of a posted daily activity schedule with any changes noted, and opportunities for quiet time alone
5. Developmentally appropriate individualized use of visual, auditory, verbal, and cognitive prompts will be implemented to remind children of rules and routines
6. Developmentally appropriate individualized use of visual, auditory, and verbal redirection will be used to teach children self-control when they first begin to violate class room rules or become aggressive
7. The children will be involved in establishing classroom rules and structure
8. Verbal and visual redirection will always be used first to discourage inappropriate behavior
9. Children who repeatedly demonstrate inappropriate behaviors will be referred to the Child Care Director and/or mental health consultant

(Bailey & Wolery, 1992; Division for Early Childhood, 1999; Neilsen & McEvoy, 2004)

Prohibited Discipline Practices:

1. Yelling, humiliating, name calling, physical threats, swearing, or teasing
2. Sitting or standing in a corner or making a child stand with arms raised
3. Rough handling of a child
4. Corporal punishment (e.g. hitting or spanking)
5. Improper restraint

Special Practices in Response to Aggressive Behavior:

Due to the high potential for staff and child injury, physical redirection is used only if required for the safety of the child or other people and limited to the practices outlined in this section of the discipline policy. An isolated area is pre-established, and if a child is physically aggressive he or she may be redirected to that area. The practices outlined below will be implemented only when necessary to protect the child and others from physical harm, and following use will immediately be included in an Individualized Positive Behavior Plan.

When a child is physically aggressive toward himself or others the child may be physically redirected to a new activity outside the classroom in a pre-specified isolated area with hand held assistance or through gently lifting and carrying with total support. Children's hands or forearms may be held to stop physical aggression that is taking place against others. The Child Care Director or designated staff member will be called to observe that physical redirection is done appropriately. Staff will directly observe the child who will repeatedly be offered his favorite toy/activity until he has regained self-control, then will be returned to his classroom. Later when the child is calm the incident will be discussed with him or her, and the child may be directed to apologize to others and/or clean up after him or her self as appropriate.

After demonstrating one incident of physical aggression children may receive a Functional Behavioral Analysis and a team meeting held to develop an Individualized Positive Behavior Plan. The Individualized Positive Behavior Plan will include individual strategies and interventions to be done at preschool (e.g., mental health consultation, implementation of behavioral strategies based on a Functional Behavioral Analysis, change in teacher, shortened day) and home (e.g., home behavioral program, home mental health services, speech therapy, occupational therapy) developed through consensus and signed by all team members. The team developing the Individualized Positive Behavior Plan must include the parent and Child Care Director. Following extreme or repeated physical aggression the child may be excluded from childcare by the Child Care Director until a meeting is held to develop an Individualized Positive Behavior Plan (Neilsen & McEvoy, 2004; Stormont, 2001).

References:

Bailey, D. & Wolery, M. (1992). Teaching infants and preschoolers with disabilities. NY, NY: Macmillan.

Division for Early Childhood (1999). DEC concept paper on the identification of and intervention with challenging behavior. www.dec-sped.org/positions/challenging_behavior.html>

Neilsen, S.L., McEvoy, M. A. (2004). Functional behavioral assessment in early education settings. *Journal of Early Intervention*, 26, 115-131.

Stormont, M. (2001). Preschool family and child characteristics associated with stable behavior problems in children. *Journal of Early Intervention*, 24, 241-251.

Behavioral Goal Integration

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- Link IEP behavior goals with student's values
- Referrals to Occupational, Physical, Speech-Language/Audiology Therapy as well as Behavioral Analysis & Neuropsychology, integrate findings into goals and FAB form
- Self-management and self reward monitoring
- Student/family agrees to and signs FAB form
- Send FAB form to new school/class, home, community agencies, & doctor for quick coordination (Hess et al., 2017)

Sensory Processing Intervention in New ASD Dx

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- **New DSM-5 Diagnosis eliminates PDD-NOS and Asperger's, consolidating "ASD" Autism Spectrum Disorder:**

- Level 1-Requiring Support

- Level 2-Requiring Substantial Support

- Level 3-Requiring Very Substantial Support

New Core Feature Subdomain of Restricted repetitive interests:

- Stereotyped movement, speech, object use

- Over adherence to routines

- Fixated interests

- Hypo/hyper sensitivity

- **SO WHAT? Expands roles of OT, PT, & Speech Therapists in assessing ASD severity and providing intervention to improve Functional Communication and Coping Strategies for improving social skills and behavior negatively impacted by Communication, Sensory Modulation, Sensory Discrimination and Sensory Based Motor Disorders**

References: (Green et al., 2015; Whitney & Miller-Kuhanek, 2012)

Developing ESSA Team Roles & IEP Goals

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Under the new ESSA "Every Student Succeeds Act" (2015) OT, PT, SLP, Psych, SW, SC, & Nursing related services are **SISP "Specialized Instructional Support Personnel". SISP can address the needs of at-risk students in school-based mental health (PBS, crises prevention team, suicide prevention), parent engagement, and school climate.**

IEP GOALS: Increase attention average attention span for classroom learning tasks to five consecutive minutes.

Average seated attention to classroom learning tasks of fifteen minutes.

Increase use of safe hands by demonstrating less than 2 incidences of hitting others daily.

Increase frustration tolerance by waiting four minutes for individual teacher attention.

www.nasisp.org/ESEA.html www.DrKathySeifert.com

Movement Break Activities

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- Draw diagonal and other shapes in the air-
- Same side & Midline Crossing-
- Five Little Hotdogs-
- Stretch: Forward, Side, Down-
- Stretch: Up: Sides, Twist-
- Favorites-
- Guess Feeling, Degree, I message-
- Racquet Circle-
- Racquet Pairs-
- Lean on Me Song & Dance-

Student's Name: 17 y/o DPTSD & CD Date: 1/2/18
 Behavior: much more than most people Sensation Avoiding a More Low Reg
Self-cutting Respondent: Self-John Agone PhD, DTR

QUESTIONS ABOUT BEHAVIORAL FUNCTION (QABF)

Rate how often the student demonstrates the behaviors in situations where they might occur. Be sure to rate how often each behavior occurs, not what you think a good answer would be.

X = Doesn't apply 0 = Never 1 = Rarely 2 = Some 3 = Often

Score	Number	Behavior							
1		Engages in the behavior to get attention.							
1		Engages in the behavior to escape work or learning situations.							
1		Engages in the behavior as a form of "self-stimulation".							
1		Engages in the behavior because he/she is in pain.							
0		Engages in the behavior to get access to items such as preferred toys, food, or beverages.							
0		Engages in the behavior because he/she likes to be reprimanded.							
1		Engages in the behavior when asked to do something (get dressed, brush teeth, work, etc.							
1		Engages in the behavior even if he/she thinks no one is in the room.							
0		Engages in the behavior more frequently when he/she is ill.							
0		Engages in the behavior when you take something away from him/her.							
0		Engages in the behavior to draw attention to himself/herself.							
0		Engages in the behavior when he/she does not want to do something.							
0		Engages in the behavior because there is nothing else to do.							
0		Engages in the behavior when there is something bothering him/her physically.							
0		Engages in the behavior when you have something that he/she wants.							
0		Engages in the behavior to try to get a reaction from you.							
0		Engages in the behavior to try to get people to leave him/her alone.							
0		Engages in the behavior in a highly repetitive manner, ignoring his/her surroundings.							
0		Engages in the behavior because he/she is physically uncomfortable.							
0		Engages in the behavior when a peer has something that he/she wants.							
2		Does he/she seem to be saying, "come see me" or "look at me" when engaging in the behavior?							
2		Does he/she seem to be saying, "leave me alone" or "stop asking me to do this" when engaging in the behavior?							
0		Does he/she seem to enjoy the behavior, even if no one is around?							
0		Does the behavior seem to indicate to you that he/she is not feeling well?							
1		Does he/she seem to be saying, "give me that (toy, food, item)" when engaging in the behavior?							
Attention		Escape		Non-social <u>Automatic</u>		Physical		Tangible	
1. Attention	1	2. Escape	3	3. Self-stim	3	4. In pain	2	5. Access to items	1
6. Reprimand	0	7. Do something	1	8. Thinks alone	3	9. When ill	0	10. Takes away	2
11. Draws	1	12. Not do	2	13. Nothing to do	2	14. Physical problem	3	15. You have	1
16. Reaction	2	17. Alone	3	18. Repetitive	3	19. Uncomfortable	2	20. Peer has	2
21. "Come see"	3	22. "Leave alone"	2	23. Enjoy by self	3	24. Not feeling well	0	25. "Give me that"	4
Total	7	Total	12	Total	14	Total	7	Total	7

14 yr old - Intellectual, Autism Spectrum, Tourette's
 Attention Deficit Hyperactivity Disorder - Sensory Processing Disorder - Deaf
 Student's Name: Sensory Processing Disorder Date: 11/2/18
 Behavior: Grab/swipe at staff Respondent: John Lagano, PhD

QUESTIONS ABOUT BEHAVIORAL FUNCTION (QABF)

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FAB Strategies® to Improve Self-Control Form

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Client: Repeated physical and verbal aggression and vulgar language; Definite difference in Behavioral, Sensory Avoiding, and Sensory Sensitivity; Autism Spectrum Disorder with Intellectual Impairment, ADHD & Bipolar Disorder

Therapist: John Pagano, Ph.D., OTR/L **Contact** John.Pagano@ct.gov

Functional Goals: Increased safe hands **Dates:** 8/15/17

A. ENVIRONMENTAL ADAPTATION

Sensory coping area/Prepare-Limit-Transitions/Low noise/Calm face/Offer noise canceling head phones

Slow: Speech-Pace/Staff removal of cell phones and glasses

Environmentally avoid & lower demands when in stimulating environments, as it can increase aggression

Visual: List/Choice of 1 activity from 1 choice; do 2 minutes minimum; clean up before next activity

B. SENSORY MODULATION

Energy level-Colors-Scents/Triggers: Event-Body/Coping strategies

Decrease, then if needed very gradually increase, sensory input/Increase: Structure-Response time

Theraputty/Playdoh/ Sit on therapy ball move: Up & down

Touch vibration: Back/Shoulders Squeeze-Press/Roll therapy ball on-Core progression

C. POSITIVE BEHAVIOR SUPPORT

Breaks: Music-Movement/Choices/Preferred tasks/Intersperse learned tasks

Priming/Verbal-Visual Mand: Verbal break: "All done"

Pre-Correction/Humor/Desensitization/Redirection to a favorite activity in a low stimulation room

Reinforce: Attempts-Individual attention-Tangible favorites: yogurt, sherbert, music

D. PHYSICAL SELF-REGULATION

Walk/Basketball/Dance/Balance beam: Forward & Back-Sideways/Coloring with scented markers

Jump on a mini-trampoline/Foam ball: Catch, saying "1, 2, 3 go before throwing/Sweeping the floor

www.challengingbehavior.org www.spdstar.org <http://www.autismprthelp.com/>

References: Domitrovich et al., 2013; Koester, 2012; LaVigna & Willis, 2012; Stahmer et al., 2011

FAB Strategies® to Improve Self-Control Form

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Client: Physically & verbally aggressive behavior with Definite difference Underresponsive/Seeks Sensation, Tactile & Movement Sensitivity; Diagnoses: Disruptive Mood Dysregulation, Attention Deficit Hyperactivity, & Radical Attachment Disorder

Therapist: John Pagano, Ph.D., OTR/L **Contact** John.Pagano@ct.gov

Functional Goals: Improve self-control **Date:** 8/1/17

A. ENVIRONMENTAL ADAPTATION

Sensory coping area/Prepare-Limit-Transitions/Low noise/Headphones/Visual list 4 tasks, check each
Weighted-Blanket/Spine roll/Steam Roller Deluxe up to 10 minutes if comfortable
Choice of 1 activity from 2 choices; do 6 minutes minimum; clean up before next activity

B. SENSORY MODULATION

Energy level-Colors-Scents-Modulate/Coping strategies/Theraputty/Sit on therapy ball move: Up & down
Decrease, then if needed gradually increase, sensory input/Increase: Structure-Response time
Touch vibration: Back-Arms/FAB Pressure Touch: Back-Arm/Spine roll
Steam Roller Deluxe (can stay in up to 10 minutes, playing with fidgets)
Roll therapy ball on-Core progression/Back tech: Press

C. POSITIVE BEHAVIOR SUPPORT

Breaks: Music-Movement/Preferred tasks/Intersperse learned tasks/Apology repair
Priming/Prompts: Verbal-Visual-Physical/Pre-Correction/Humor/Redirection to a favorite activity
Reinforce: Attempts/Specific praise/Individual attention/Pre-specified tangible for completing 4 tasks

D. PHYSICAL SELF-REGULATION

Move: Mats-Tables/Deliver: Books-Messages-Box/Draw/Crafts
Walk/Bike/Scooter/Scooterboard/Swim/Basketball/Playground-Structure/Cardio-Weight lifting
Jump on a mini-trampoline-Jump-O-Lina/Prone on therapy ball: Hands rock/Wheelbarrow walk
Crash Pad/Scooter board: Pull-Push/Suspended Swing: Forward-Back-Lateral

www.challengingbehavior.org www.spdstar.org

References: Domitrovich et al., 2013; Koester, 2012; LaVigna & Willis, 2012; Stahmer et al., 2011

FAB Strategies® to Improve Self-Control Form

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Client: 15 year old with a diagnosis of PTSD; Hx of sexual abuse with curren self-injurious skin burning and head banging; Adolescent Sensory Profile Low Registration and Sensation Avoiding more than other with Limilar to most people sensory Sensitivity and Sensation Seeking

Therapist: John Pagano, Ph.D., OTR/L **Contact:** John.Pagano@ct.gov

Functional Goals: Decrease self-injurious behavior

Date: 8/8/17

A. ENVIRONMENTAL ADAPTATION

Fidget/Sensory coping area/CheweyFidget/Coping bag

Weighted vest/Chewy

B. SENSORY MODULATION

Energy level-Colors-Scents-Modulate/Triggers: Event-Body/Coping strategies

Decrease, then if needed gradually increase, sensory input/Increase: Structure-Response time

Theraputty/Self-brushing

Back X/Spine crawl/Tap-Press self: Ear to palm

C. POSITIVE BEHAVIOR SUPPORT

Goal-Plan-Review/Get permission before touching her/Breaks: Music-Movement/Choices/Preferred tasks

Prompts: Verbal-Visual-Physical/Scaffolded writing/Partial sentences

Pre-Correction/Humor/Desensitization/Redirection to a favorite activity

Reinforce: Attempts-Specific praise-Individual attention/I message/Bully proof

D. PHYSICAL SELF-REGULATION

Walks/Drawing/Crafts/Shopping/Cooking

Suspended Swing: Forward-Back-Lateral-Spin

www.fabstrategies.org www.challengingbehavior.org www.spdstar.org

References: Domitrovich et al., 2013; Koester, 2012; LaVigna & Willis, 2012; Stahmer et al., 2011

FAB Strategies® for Learning Readiness Form

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X-Therapist ✓-Staff & family A-Attachment Circle-Equipment given

Student: _____ Teacher/Therapist: _____ Contact: _____
Functional Goals: _____ Dates: _____
Dates/Baselines: _____

A. ENVIRONMENTAL ADAPTATION

- ___ *Prepare-Limit-Transitions/Low noise/Headphones/Fidget-Comfort Box-Bag*
- ___ *Seat Stable-Separate-Carrel-Near teacher-Theraband-Disc O Sit/Clip-Slant board/Pencil grip*
- ___ *Visual List-Schedule-If then-Calm face/Slow: Speaking-Pace/Sensory coping Area-Room*
- ___ *Choice of 1 activity from 1 2 3 4 choices; do ___ sec./minutes minimum; clean up before next activity*

B. SENSORY MODULATION

- ___ *Move Head-Shoulders-Hip circles/Tense & relax/Mindful clock Sitting-Standing*
- ___ *Slow breathing Hand-Finger Paint-Tracing-Squeezing-Energy ball-Circle body-Heart/Feel your feet*
- ___ *Self-squeezing Shoulder-Arm-Fingers/Shaking/Kindness/4-2-4-2-Movement/4-4-6-2-Movement*
- ___ *Arousal level-Modulate/Deliver Books-Messages/Freeze dance/Giant steps/Simon says/10 hotdogs*
- ___ *Twirling bead chain/Ipad apps Big bang patterns-Mebop maestro-ABC kids-Drawing-Stylus*
- ___ *Sequentially explore Beans-Rice-Theraplast-Playdoh-Sand-Wiki stix-Water-Floof-Glue-Shaving cream*
- ___ *Head crown/Shoulder Squeeze-Press/Spine roll/Back X/Spine Crawl/Light, slow letters on back*
- ___ *Brush-Vibrate-Press: Back-Arms/Self-Brushing/Self-Buzzing*
- ___ **Chewy/Vest-Pressure-Weighted-Blanket/Roll ball Core-Breathing/Back Tech: Pressing-Tapping**

C. POSITIVE BEHAVIOR SUPPORT

- ___ *Ask permission to Kid-Touch/Head filter/Invite/Still like you/Facing door/Grounding/Partial sentences*
- ___ *Conditioned calm/Mand-Break/Sensory match-Coaching/Desensitization/Practice saying/Redirection*
- ___ *Pre-correction/Self-management/Tolerance for delay/Coping card/FAB turtle/Revise curriculum*
- ___ *Preferred: Tasks/Distractor/Choices/Pre-play/Intersperse learned tasks/Priming/Prompts*
- ___ *Reinforce: Good attempt-Appropriate-Point chart-Tangible-Desensitization-Self-management*

D. PHYSICAL SELF-REGULATION

- ___ *Push wall/Marine-Wall-Pushups/Exercise band tasks/Pull-ups/Treadmill/Weight lift/Punch heavy bag*
- ___ *Prone on therapy ball: Hands rock-Wheelbarrow walk-Fly/Playground-Structure/Quadruped pass*
- ___ *Ball: Soccer-Pass-Wall-Letter-Bat-Bounce activities/Beanbag pass/Mini-trampoline jumping*
- ___ *Sequential: Orienting/Drawing/Bilateral integration/Drumming*
- ___ **Supported** sit on therapy ball: Forward & back-Up & down-Sides-Mindful clock
- ___ **Crash pad/Scooter board: Self-propel-Pull-Push/Suspended Swing: Forward & Back-Lateral-Spin**

Activities: _____
Activities: _____
Activities: _____

www.fabstrategies.org www.pbisworld.com www.spdstar.org breath-body-mind.com

Parent/guardian Signature Supporting Program: _____

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Do It Anyway

Mother Teresa & Kent Keith

Children whose lives you transform may never even thank you
Help the children anyway

If you are kind
People may accuse you of selfish ulterior motives
Be Kind Anyway

Give the world the very best you have
And it might not be enough
Give your best anyway

What you spend years building
Someone could destroy overnight
Build anyway

The good you do today
People will often forget tomorrow
Do good anyway

People are often unreasonable, illogical and self-centered
Love them anyway

You see in the end
It is always about you and God
It was never about you and them
Anyway

FAB SLAM CHALLENGE

School OT Crisis Response & Prevention

Occupational Performance Impact/Role of Occupational Therapy

Crisis response and prevention is an important component of the scope of practice of school occupational therapy practitioners. Methods used to physically manage a student's behavior or involuntarily confine their movement are dangerous and may cause trauma. Many schools have stopped using restraint and seclusion and have adopted crisis prevention and response methods to address the needs of students experiencing emotional and behavioral distress. Consistent crisis prevention and response interventions can be incorporated into multi-tiered systems of support (MTSS) at the school, classroom, small group, and individual levels. Occupational therapy practitioners collaborate with educators and other school personnel to provide multiple levels of intervention that address crisis response and prevention.

This decision guide describes proactive evidence-based strategies within the scope of occupational therapy practice and can be used when working with students who are experiencing emotional and behavioral distress.

Promote Mental Wellness Across Contexts

Multidisciplinary School Team

- Train interdisciplinary staff on restraint reduction interventions, including how to identify, implement, and evaluate outcomes related to short- and long-term goals for restraint reduction.
- Educate families and school personnel on signs and symptoms of emotional and behavioral distress and who to notify.
- Use evidence-based and culturally responsive strategies to address emotional and behavioral health concerns and create a supportive school climate.
- Educate staff on trauma-informed care and trauma-responsive approaches to avoid retraumatization.
- Incorporate movement and mindfulness (e.g., breathing, quiet reflection) breaks throughout the school day.

Students

- Provide education to students and school personnel on effective, non-violent communication.
- Coach student leaders to identify, address, and report mistreatment (e.g., bullying, putdowns, exclusion) of other students.
- Teach students social skills, rules, expected behaviors, and self-regulation skills.
- Promote positive relationships among students in the classroom, cafeteria, and playground.
- Teach students to become aware of their early triggers and provide safe spaces for breaks and use of effective calming strategies.

Prevent Further Existing Symptoms

School Team (including teachers, administrators, related services providers, student, and family)

- Consult with educators and other school personnel to integrate movement (e.g., yoga), mindfulness breaks, and trauma-informed strategies into daily routines.
- Consult with teachers, families, and other school personnel to develop an individualized plan to support the student and facilitate de-escalation and promote overall health and wellness.

Students

- Perform comprehensive assessments of client's strengths, facilitators, and barriers to occupational performance.
- Document assessment results for students with difficulties processing sensory information. Provide sensory equipment as needed.
- Modify and adapt classroom environments (e.g., reduce distractions and triggers) and other contextual features to support students' emotional and behavioral wellness.
- Provide opportunities for students to engage in preferred creative arts activities (e.g., drumming, blogging) that allow for individual expression.
- Use play-based approaches to support behavior regulation and social emotional development.
- Teach students to self-monitor and request breaks and coping strategies as needed.
- Teach students how to effectively communicate and build positive relationships with adults and peers.
- Encourage students with individualized education plans (IEPs) to attend and participate in their meetings.

AOTA Resources

- AOTA—[Mental/Behavior Health and Wellbeing Decision Guide](#)
- AOTA—[Choosing Wisely Guide to Sensory-specific and Related Assessments](#)
- AOTA—[Occupational Therapy Practice Guidelines for Children and Youth 5-21](#)
- AOTA—[Addressing Acute Stress and Trauma—Decision Guide for COVID-19](#)
- AOTA—[Societal Statement on Stress, Trauma, and Post-Traumatic Stress Disorder](#)

Additional Resources

These websites provide information and resources for occupational therapy practitioners engaging in crisis prevention and response.

- [PBIS World](#)
- [STAR Institute](#)
- [FAB Strategies](#)
- [National Alliance of Specialized Instructional Support Personnel \(NASISP\)](#)
- [The National Center for Pyramid Model Innovations](#)

Resources

Fraser, K., MacKenzie, D., & Versnel, J. (2017). Complex trauma in children and youth: A scoping review of sensory-based interventions. *Occupational Therapy in Mental Health, 33*(3), 199–216.

Grasley-Boy, N. M., Reichow, B., van Dijk, W., & Gage, N. A. (2020, May 4). Systematic review of Tier 1 PBIS implementation in alternative education settings. *Behavioral Disorders, doi 0198742920915648*.

Pat-Horenczyk, R., & Yochman, A. (2020). Sensory modulation in children exposed to continuous traumatic stress. *American Journal of Occupational Therapy, 74*(4_Supplement_1), 7411505189p1, doi 7411505189p1.

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Occupational Therapy to Reduce School Aggression, Restraint, and Seclusion

Schools in recent years have increasingly come to appreciate the importance of prevention efforts for reducing aggression and minimizing the use of restraint and seclusion to cope with student aggression. This trend has emerged as legal advocates have documented the use of restraint and seclusion by schools, categorizing these techniques as *corporal punishment* that can have negative physical and psychological effects on students (LeBel, Nunno, Mohr, & O'Halloran, 2012). As a result, the U.S. Department of Education (n.d.) directed every state to review and, if appropriate, address their restraint and seclusion policies. *Restraint* is defined as physical methods impeding a student's physical movement, and it includes *mechanical* (e.g., equipment like straps) and *physical* (e.g., manual holding) restraints. *Seclusion* is defined as

Strategies and tactics for promoting positive behavior in the classroom through general school and classroom initiatives as well as individual interventions.

John Pagano

involuntary confinement of a student, in which he or she is physically prevented from leaving a designated area (LeBel et al., 2012).

In psychiatric hospitals and residential treatment facilities, occupational therapy to reduce aggression, restraint, and seclusion involves facilitating meaningful occupations, identifying triggers for out-of-control behavior, teaching coping strategies to manage strong feelings, individualizing environmental adaptations, and providing sensory coping rooms (Caldwell et al., 2014; Warner, Spinnaz-

zola, Westcott, Gunn, & Hodgdon, 2014). Through task analysis and collaborative problem solving with clients, occupational therapists provide a unique contribution to team trauma-informed intervention for reducing out-of-control behavior by evaluating a client's unique triggers and utilizing his or her most effective coping strategies (Sutton, Wilson, Van Kessel, & Vanderpyl, 2013).

That same approach also applies in school, where occupational therapy practitioners can help reduce aggression, restraint, and seclusion through school

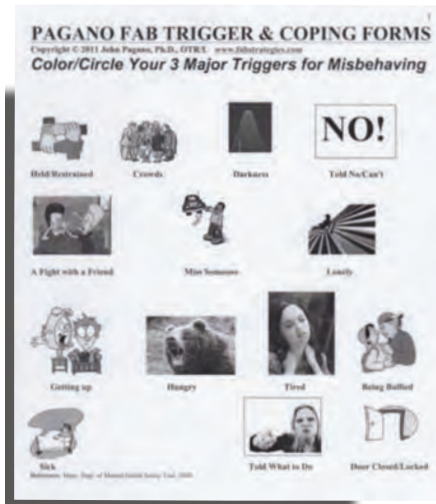


Figure 1. Pictures of Common Trigger and Coping Strategies to Help Students With Special Needs Identify Their Individual Trigger and Coping Strategies.

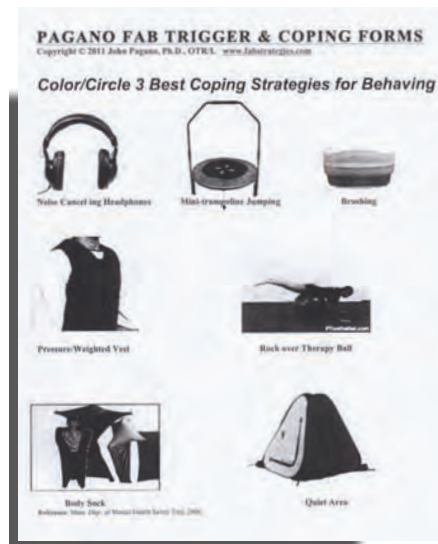


Figure 2. Example of a School Occupational Therapy Board

and classroom prevention efforts as well as intensive group and individual intervention (Cahill & Pagano, 2015). This article provides an introduction to school-wide and individual interventions, with some resources provided for obtaining additional information.

School and Classroom Prevention Strategies

Behavior and classroom management are the most commonly identified concerns for which teachers request technical assistance (LeBel et al., 2012). At the school and classroom prevention level, occupational therapists evaluate the occupations of students and faculty to help embed self-control strategies in the school culture (Cahill & Pagano, 2015).

Occupational therapists can help school teams reduce student aggression, restraint, and seclusion by adapting classroom management strategies to better address the requirements of students with special needs as well as those who are typical (Simonsen, Sugai, & Negenro, 2008), keeping the interventions in as inclusive an environment as possible. The sidebar on page 15 illustrates integrating evidence-based, school-wide strategies with more intensive strategies to simultaneously teach all students, including those who have special needs.

A specific example of providing prevention in the inclusive classroom, pictured in Figure 1, is the use of pictures of common trigger and coping strategies. These forms

can be included as a component of the occupational therapy evaluation, enabling students and teachers to collaboratively identify the student's most common triggers for out-of-control behavior and most effective coping strategies. After students are able to identify their most common triggers for inappropriate behavior, they can learn to minimize these situations (e.g., asking for a snack or break when they realize they are getting hungry or tired), and better anticipate their need for coping strategies.

Another universal prevention strategy is a school occupational therapy bulletin board, shown in Figure 2. This example invites students and teachers to pause and “feel your feet,” a body awareness mindfulness strategy documented to significantly reduce aggression in students with conduct disorder (Singh et al., 2007). Posting such coping strategy bulletin boards help occupational therapy practitioners embed self-regulation into the school culture.

Occupational therapists can also help teachers and students prevent aggression, restraint, and seclusion through the following steps:

- Recommend strategies that address the social environment and facilitate friendships in the inclusive classroom—for example, direct students who lack understanding about maintaining appropriate personal boundaries with others to first ask, “Is it OK if I touch you?”

- Evaluate and modify the physical environment, such as lowering classroom noise levels or teaching students to adapt by using noise-canceling headphones.
- Provide student-specific consultation for developing individualized adaptive techniques and equipment that increase academic success. Strategic use of adaptive techniques and equipment can reduce frustration tolerance, decreasing the risk for student aggression, restraint, and seclusion. Adaptive techniques (e.g., assignment modifications that reduce the number of math problems assigned while ensuring the concepts are fully addressed) and adaptive equipment (e.g., optimally stable seating close to the teacher) are best developed jointly by the teacher and occupational therapist. Figure 3 on page 15 shows a study carrel that an occupational therapist and teacher developed to help a student reduce his frustration, improve visual attention, and increase independent completion of written assignments.
- Prepare students for upcoming transitions by offering picture charts, schedules, and other visual supports.
- Promote classroom initiatives, such as bullying prevention, by developing visual supports for students with special needs, such as the poster show in Figure 4, which offers specific coping strategies and rewards for appropriate behavior.

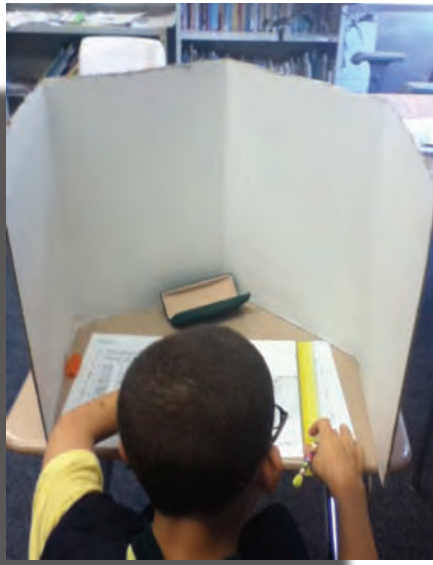


Figure 3. Study Carol Developed by an Occupational Therapist and Teacher

- Help teachers develop a quiet area in the classroom where students can go when they begin noticing their triggers to implement coping strategies for self-calming.
- Adapt an existing school-wide positive behavioral support curriculum by including Simon Says games and

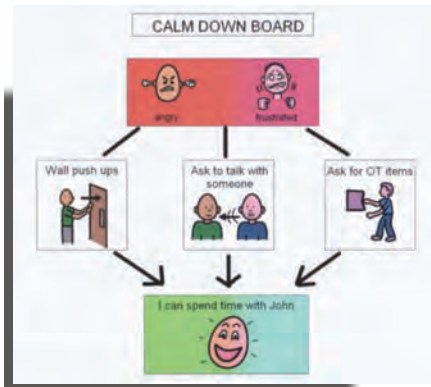


Figure 4. Examples of Visual Supports for Special Needs Students

mindfulness movement activities to accommodate students' needs for kinesthetic learning opportunities (Cahill & Pagano, 2015). For example, Figure 5 shows an adaptation of the Promoting Alternative Thinking Strategies school-wide program (Domitrovich, Cortes, & Greenberg, 2007). In this

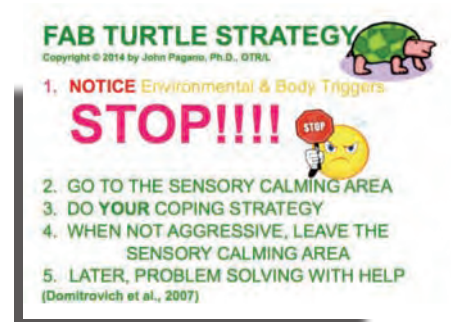


Figure 5.

adaptation of the traditional “turtle” technique (Domitrovich et al., 2007), students are trained to notice individual environmental and body triggers, and (rather than pull their shirt over their head and take three deep breaths) use their individualized coping strategy (e.g., do pushups,

Evidence-Based Class Behavior Strategies

Integrating Special Needs Adaptations

(Simonsen, Sugai, & Negron, 2008)

Create a structured classroom environment with maximal open space, dividers, and minimal distractions.

Cut-out footprints, stop signs, and masking tape can help students remember physical boundaries. Study carrels and optimally stable sitting (symmetrical, neutral pelvis against seat back, 90° angle of thighs, calves, and supported feet) can promote attention. Children who have good balance but difficulty remaining seated can benefit from a Theraband tied on their legs or arms of their chair, Disk-o-Sit cushions, Therapy-ball seats, or by standing.

Maximize students' opportunities to respond in class with small erasable boards they hold up to answer questions.

Teach, review, and post a few major classroom procedures and expectations.

Strategically place visual schedules, social stories, choices, and self-control reminders; prepare before transitions; direct students to choose one activity for a set period before cleaning up and choosing another task; designate a quiet area in the classroom to promote direction following.

Teach responding appropriately to feelings and social skills using positive behavioral support strategies.

Basic positive behavioral support (e.g., turtle technique, character comics, stretching exercises, tense and relax muscles, freeze dance) can be co-led with related services mental health staff, occupational therapists, speech-language pathologists, 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.

Use a sticker chart to reward 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.

Provide group reinforcement opportunities for the class to earn special privileges through appropriate behavior.

Additional positive behavioral support activities, mindfulness games, exercise, movement, and muscle breaks (e.g., Giant Steps, Simon Says, pushups) can be earned by the class for safe behaviors during break activities and returning to classwork immediately after breaks.

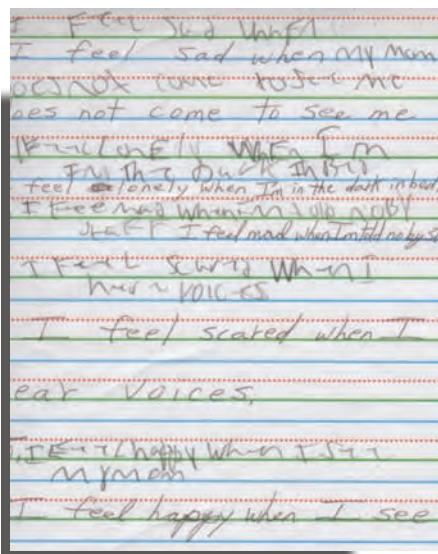


Figure 6.

For More Information

School Mental Health Tool Kit

www.aota.org/Practice/Children-Youth/Mental%20Health/School-Mental-Health

FAB (Functionally Alert Behavior) Strategies to Improve Self-Control

<http://files.eric.ed.gov/fulltext/ED555615.pdf>

Best Practices for Occupational Therapy in Schools

By G. F. Clark & B. Chandler. Bethesda, MD: AOTA Press. (\$89 for members, \$126 for nonmembers. To order, call toll free 877-404-AOTA or shop online at <http://store.aota.org>, and enter order #900344.)

Online Course

Bully Prevention and Friendship Promotion: Occupational Therapy's Role in School Settings

By S. Bazyk, 2014. Bethesda, MD: American Occupational Therapy Association. (Earn 1 AOTA CEU [1 NBCOT PDU, 1 contact hour]. \$10 for members, \$19.95 for nonmembers. To order, call toll free 877-404-AOTA (2682) or shop online at <http://store.aota.org>, and enter order #WA1080.)

Self-Paced Clinical Course

Collaborating for Student Success: A Guide for School-Based Occupational Therapy

By B. Hanft & J. Shepherd 2008. American Occupational Therapy Association. (Earn 2 AOTA CEUs [25 NBCOT PDUs, 20 contact hours]. \$259 for members, \$359 for nonmembers. To order, call toll free 877-404-AOTA (2682) or shop online at <http://store.aota.org>, and enter order #3023.)

put on noise-canceling headphones) in the quiet area to self-calm (Pagano, 2015).

Intensive Occupational Therapy Assessment and Intervention

For more intensive, individualized interventions, the occupational therapy evaluation can consider how functional writing, visual-motor, sensory processing, and other school-related skill difficulties appear to contribute to students' aggression, restraint, and seclusion challenges. Occupational therapists can also collaborate with educational teams to conduct a functional behavioral analysis that identifies the role that setting events (e.g., loud classroom noise levels) have on a student's aggressive behavior, and contribute to a behavioral plan by specifying adaptive techniques and equipment that can reduce aggressive school behavior (Cahill & Pagano, 2015; Champagne, Koomar, & Olson, 2010).

School occupational therapists can also include increasing appropriate on-task learning behavior as part of students' individualized education program (IEP) goals. Occupational therapy sessions to promote appropriate behavior can address the development of emotional regulation strategies (e.g., self-identifying arousal level, environmental triggers, body triggers, and coping strategies). Occupational therapy sessions can also be used to evaluate curriculum modifications (e.g., movement breaks, rest periods, mindfulness activities, adjusting teaching methods to the student's learning style).

Direct school occupational therapy often simultaneously addresses multiple IEP goals, such as improved functional writing, as well as decreasing aggression by writing about distressing feelings. An occupational therapist could use color-lined paper to improve functional writing while simultaneously using partial sentences to encourage the written expression of feelings. Figure 6 is an example of a school occupational therapy intervention done in conjunction with the student's language arts teacher and school social worker to address functional writing skills and the expression of feelings.

Conclusion

A student's ability to behave appropriately is important for school learning tasks, and school occupational therapy practitioners can enhance team efforts to address the very important need to reduce student aggression, working to support broader school and classroom efforts to promote positive behavior, as well as effectively addressing the issue through individual interventions. **OT**

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Evaluating Clients With Autism Spectrum Disorders: **A Life Span Approach**

How evaluation, assessment, and intervention for clients with autism change over the life span.

by Carolyn Murray-Slutsky, Jennifer Richman, and John Pagano

 Occupational therapy can be used to evaluate and provide interventions for people with autism spectrum disorder (ASD) across the life span, to enhance participation in roles, habits, and routines in the home, school, workplace, and other community settings, as noted in the *Occupational Therapy Practice Framework: Domain and Process* (3rd ed.; American Occupational Therapy Association [AOTA], 2014).

The evaluation consists of the occupational profile (including occupational history, patterns of daily living, interests, values, needs, problems, and concerns about occupational performance) and an analysis of occupational performance (including supports and barriers to occupational performance and targeted outcomes, performance skills, and patterns; AOTA, 2014). However, the type of assessment and intervention vary depending on the age of the client and the setting in which they are being served. This article provides an overview of the varying tools and approaches

occupational therapy practitioners may use with clients with ASD across the life span (see Table 1 on p. 13 for a listing of the assessments).

Early Identification, Screening, and Diagnostic Evaluations

Occupational therapists can screen children for early signs of ASD that include lack of finger pointing, unresponsiveness to their name being called, and echolalia. Occupational therapists should include their clinical observations and administer published screening tools, such as the Modified Checklist for Autism in Toddlers (Autism Speaks, 2012), or parent/caregiver report measures, including the Social Communication Questionnaire (Al-Qabandi, Gorter, & Rosenbaum, 2011). Children demonstrating early signs of ASD should be referred for further diagnostic evaluation when warranted.

The goal of early screening and early diagnosis is to increase access to appropriate care and improve developmental outcomes (Centers for Disease Control and Prevention, 2017).

Early Childhood and Preschool

Play is a child's main occupation during the early childhood and preschool years and is the framework from which the occupational therapist evaluates the child's development, social, sensory-motor, adaptive, cognitive, communication, sensory processing, and motor behaviors. The occupational therapist also uses play to evaluate the child's interests, motivation, and restrictive or repetitive play patterns and determine methods to adapt activities to make them more naturally reinforcing (AOTA, 2015b; Tomchek & Koenig, 2016). These early years of life are critical periods of brain growth and a time of substantial neural plasticity (Dawson, 2008). It is believed that early evaluation and intervention for children with suspected or confirmed ASD during this period may help counteract the progressive symptom development and ultimately prevent ASD-related impairments before they fully manifest (Dawson, 2008; Zwaigenbaum et al., 2015). Family-centered care and active involvement of the families and/or caregivers is a central facet of the occupational therapy evaluation.

“Family-centered care and active involvement of the families and/or caregivers is a central facet of the occupational therapy evaluation.”

Case Example

An occupational therapy evaluation was requested for Joshua, who was 3 years and 10 months old and had ASD. The referral concerns were motor planning difficulties interfering with speaking and signing, overall clumsiness, tantrums related to task demands, and lack of participation. His mother was concerned about his extreme loudness, constant running around, and tantrums. She had requested help from the occupational therapist in coping with her son’s behavior. The occupational therapy evaluations for Joshua included an occupational profile (AOTA, 2014; Tomchek & Koenig, 2016), Infant/Toddler Sensory Profile (Dunn, 2002), the Peabody Developmental Motor Scales (Folio & Fewell, 2000), and the Test of Playfulness (Bundy, 2010). Joshua’s mother reported concerns that her “over sensitivity” to Joshua’s screaming and constant movement was affecting her ability to “be a good mother.” To assess this, Joshua’s mother was given the Adolescent/Adult Sensory Profile (Brown & Dunn, 2002).

Joshua’s scores on the Infant/Toddler Sensory Profile indicated “definite difference” (more than others) in low registration and sensation seeking. Specific scores indicated that Joshua “almost always” needed to be touched to gain his attention, avoided eye contact, found ways to make noise with toys, enjoyed looking at moving or spinning objects, and enjoyed physical activity. Joshua’s mother’s scores on the Adolescent/Adult Sensory Profile were higher than normal for sensory sensitivity and sensation avoiding.

The sensory profile scores were used to contrast the differences in sensory processing and needs between Joshua and his mother. Joshua was “much more likely” than others his age to miss sensory stimuli and to actively seek out sensory input, whereas his mother was much more sensory sensitive and likely to avoid sensory input than most people. These sensory differences were addressed not as flaws but as sensory tendencies that put

stress on their relationship but could be helped through coping strategies.

Clinical observations, and the scores from the Infant/Toddler Sensory Profile and the Peabody Developmental Motor Scales, indicated that Joshua was low registration, was sensory seeking, and had motor planning challenges. The occupational profile and the Test of Playfulness indicated that Joshua’s mother was looking for ways to play with her son, help him communicate, and prevent his tantrums.

Twice-weekly occupational therapy services were recommended in conjunction with Joshua’s mother and a speech-language pathologist. The occupational therapy treatment goals were to:

- Develop environmental adaptations and sensory strategies to improve mother–child interactions as well as Joshua’s sensory discrimination, processing, and motor planning
- Improve Joshua’s functional skills in the areas of seated attention, grasping, and object manipulation
- Improve Joshua’s participation in interactive play and daily activities
- Strengthen Joshua’s mother’s confidence, interactions, and ability to meet Joshua’s developmental and emotional needs, while meeting her own
- Improve Joshua’s ability to communicate



School Age

Functional demands increase as the child with ASD becomes school age. The occupations include more and greater sophistication in performance in play; academics; socializing; ADLs; leisure and adaptive behaviors with a primary focus on school learning; and developing sensory, motor, behavioral, and cognitive skills required for social and academic participation. School-based occupational therapists evaluate barriers to participation and build competencies required for academic, social, school-based extracurricular, and routine-oriented tasks. Through education, team collaboration, and partnership with students, they foster student access to and adequate progress in the national and/or state-mandated curriculum (AOTA, 2015c).

Children with ASD often demonstrate clear sensory differences. The extent to which these sensory features are present may moderate or intensify the severity of social communication difficulties and repetitive behaviors that characterize ASD (Lane, Young, Baker, & Angley, 2010). Occupational therapy practitioners often use sensory motor and sensory integrative evaluations and interventions with children who have ASD. Ayres Sensory Integration® is used to identify and address differences in neurological processing of sensation that can affect self-regulation, behavior, attention, and performance (AOTA, 2015a). Sensory-based observations, parent and teacher profiles, and standardized assessments are used to evaluate sensory differences.

Case Example

Danielle, a 10-year-old student with ASD and anxiety disorder, was referred for an occupational therapy consultation by her teacher because of sensory concerns. The teacher reported that Danielle's extreme distractibility, particularly during the last hour of school, and an attention span of only about 7 minutes despite good effort, was severely hindering her ability to actively participate in various school activities. The teacher was looking for recommendations and classroom accommodations. The occupational profile and the Short Sensory Profile 2 (Dunn, 2014) were included in the occupational therapy evaluation and observation. Danielle's scores indicated sensitivity and sensory section scores that were "much more than others," and "just like others" performance in all other areas (e.g., seeking, avoiding, registration, behavioral sections). The School Function Assessment (Coster, Deeney, Haltiwanger, & Haley, 1998) was administered to assess Danielle's participation in school routines. Because the evaluation and observation suggested that Danielle had sensory over-responsivity to auditory, tactile, and multisensory processing, efforts to reduce multisensory stimuli (auditory and tactile) were the focus of evidence-based environmental adaptations (Green et al., 2015). The occupational therapist worked closely with the teacher and integrated strategies to help Danielle focus during, attend to, and participate in class, while working

within the teacher's classroom structure and comfort. Several effective accommodations included scheduling the most challenging academic activities earlier in the day and determining Danielle's preferred placements for work areas to reduce distractions from peers and simultaneous tactile and auditory input.

Adolescents

Greater social expectations are placed on the growing child as they transition from childhood to adulthood. The teen years are a critical period for an individual with ASD, as they begin to age out of the education system and enter into pre-vocational, community, and/or residential placement. Adolescence is also a time of vulnerability to mental health challenges as socio-emotional stressors and demands increase (Pfeiffer, Kinnealey, Reed, & Herzberg, 2005). A positive transition creates a solid foundation for an adaptive adult life course (Shattuck, Wagner, Narendorf, Sterzing, & Hensley, 2011; Shattuck et al., 2012).

Main occupations include increased responsibility in IADLs, such as money management and participating in household chores, transitioning into college, pre-vocational training, romantic relationships, engaging in hobbies, and preparing for the transition from school to community-based programs and/or work.

Occupational therapy evaluations, in addition to the occupational profile, may

functional leisure skills and interests that can facilitate community integration, self-esteem, and self-worth. Long-term planning, such as guardianship preparation, post school-age life, and long-term care may be an integral part of the evaluation (Case-Smith & Arbesman, 2008). In addition to the occupational profile, the Kohlman Evaluation of Living Skills (KELS; Kohlman Thomson & Robnett, 2016) and the Adaptive Behavior Assessment System (ABAS-3; Harrison & Oakland, 2015) may be used.

Adults

As young adults with ASD transition to adulthood, several life events occur. Families have to decide what happens after high school, when the Individuals with Disabilities Education Act-mandated services conclude. Recent studies have found that relatively few young adults with autism receive assistance after high school (Shattuck et al., 2011; Turcotte, Mathew, Shea, Brusilovskiy, & Nonnemacher, 2016). Parents also need to start making decisions to ensure their young adult will be taken care of when they can no longer fill this role.

Occupational therapy assessments help to identify client needs, strengths, interests, meaningful occupations, work skills, and living options to ensure successful transitions. Occupations include work; independent living; IADLs, such as shopping, doing laundry, and paying bills; ADLs, such as cooking; and overall community



"Occupational therapy assessments help to identify client needs, strengths, interests, meaningful occupations, work skills, and living options to ensure successful transitions."

also assess occupational performance and level of independence by measuring sensory processing and socio-emotional skills, visual-motor and cognitive skills, ADLs and IADLs, and neuromotor and musculoskeletal functions. The occupational therapist is also trained to evaluate

integration. Occupational therapists use their background in sensory processing, task analysis, mental health, learning style assessment, and environmental modifications to evaluate independence regarding living arrangements and vocational skills, as well as functional leisure interests that will improve quality of life.

Case Example

Stevie was a 25 year old with autism. He had graduated from a supported academic program but was having difficulty transitioning to independent living. His passion and the focus of his academics had been geology. He was referred by his Vocational Rehabilitation Counselor for an occupational therapy assessment to provide recommendations for assistance needed. Assessments completed included an occupational profile, KELS, and ABAS-3.

Stevie demonstrated motivation to live on his own, even though he received extensive support from his parents. He could take care of his basic hygiene and

assessing Stevie's progress, addressing his functional concerns and interests, and improving his independence and occupational performance.

As a result, Stevie moved into a small apartment and got a paying part-time job/internship at a private jewelry store nearby, and also set up his own website to sell polished rocks and gems himself. He became independent in managing his IADLs of housecleaning, laundry, grocery shopping and meal planning and cooking, with a weekly schedule and task organizers set up for each task, and he learned to keep track of his expenses using a computer-assisted spreadsheet. Steve also joined a local geology

profile to determine the effect of sensory issues on function; current occupations; motivations; behaviors; independent daily routines and problematic routines; current leisure, recreational, and exercise activities and interests; current social supports and any projected changes; and the individual's and caregiver's concerns, questions, goals, and priorities.

Evaluations look at the aging process; sensory and physical components of aging and their effect on function; the effects the characteristics of autism have on the individual's ability to function; the individual's current level of functioning; and the individual's and caretaker's goals, desires, and priorities. The evaluation identifies ways to minimize the effects of aging while strengthening current skills; adapt the environment and educate others on accommodations to meet the needs or behaviors characteristic of ASD or aging that interfere with the ability to participate; develop skills and systems to access social, leisure, and recreational activities; and address the goals and priorities of the individual to improve their quality of life.

“Older adults will also be transitioning to a time when they will not have the benefits of parental oversights, support, and advocacy.”



self-care needs, but several IADLs were a concern, such as managing his finances. In addition, Stevie reported that he often felt lonely. He had tried unsuccessfully to make friends, and he continued to find that to be a void in his life.

IADL areas that required support and training included doing laundry and other housekeeping tasks; planning, preparing, and cooking meals; paying bills and managing finances; maintaining his health; and, because he did not drive, using public and other transportation solutions. The occupational therapist worked closely with Stevie, the Vocational Rehabilitation Counselor, his assigned Social Worker, and his family to establish systems and schedules, and to establish ongoing instructions in areas of need. The Goal Attainment Scale was used to develop individualized goals that addressed Stevie's personal and occupational performance needs, with his intense interest in geology (e.g., mining, cleaning, identifying, cutting stones) identified as an area that could be expanded to include leisure, social, and vocational opportunities. The occupational therapist became a vital part of the team in coordinating services,

group that sponsored field outings and, while there, made friends with other like-minded individuals. His parents continued to be actively involved in his life and reported he was thriving on his own, appeared to be happy, and showed increased self-confidence.

Older Adults

Aging with ASD brings not only the ongoing challenges of communication, social interaction, and behavioral and/or sensory issues, but also the social, physical, and mental health issues often experienced with old age. Older adults will also be transitioning to a time when they will not have the benefits of parental oversights, support, and advocacy. Often this support was what enabled them to live and work in the community.

Evaluations are tailored to the individual's specific lifestyle and needs. Individuals may be living independently, with family, in group homes, or in institutional care. The evaluation starts with the occupational profile, to identify the individual's background, including medical history, and also includes a sensory

Case Example

Adam was a 70-year-old male with autism and depression. He lived alone, was afraid to leave his apartment, had limited social supports, and was a client of an outpatient day treatment program. He appeared disheveled and was socially isolated, anxious, obese, and pre-diabetic. Both his parents had passed away years prior and he felt guilty about the burden he had placed on them while they were alive, further leading to his depression. Adam was referred by his case manager at the clinic for occupational therapy evaluation and intervention. The occupational therapist used the occupational profile, Adolescent/Adult Sensory Profile, KELS, interest checklist, and Canadian Occupational Performance Measure (Law et al., 2005) to evaluate Adam's occupational performance, sensory processing skills, safety in the home, potential functional leisure skills, and occupations he would like to improve on. The evaluation results indicated that he was over responsive to tactile, visual, and multi-sensory input. He was often overstimulated while walking

Table 1. Assessments for Autism Across the Life Span

Early Childhood	School Age	Adolescents	Adults	Older Adults
Sensory Processing Measure—Preschool: Home (Ecker & Parham, 2010); Sensory Processing Measure—Preschool: School (Miller Kuhaneck, Henry, & Glennon, 2010)	Sensory Processing Measure—Preschool: Home; Sensory Processing Measure—Preschool: School	Adolescent/Adult Sensory History (May-Benson, 2015)	Adolescent/Adult Sensory History	Adolescent/Adult Sensory History
Bayley Scale of Infant and Toddler Development, 3rd Edition (Bayley, 2005)	Sensory Profile 2 (Dunn, 2014)	Kohlman Evaluation of Living Skills (KELS; Kohlman Thomson & Robnett, 2016)	KELS	KELS
Infant/Toddler Sensory Profile (Dunn, 2002)	Goal-Oriented Assessment of Lifeskills (Miller & Oakland, 2013)	Goal-Oriented Assessment of Lifeskills	COPM	COPM
Test of Playfulness (Bundy, 2010)	Canadian Occupational Performance Measure (COPM; Law et al., 2005)	Adaptive Behavior Assessment System (ABAS-3; Harrison & Oakland, 2015)	ABAS-3	Quick Neurological Screening Test 3rd Edition (Mutti, Martin, Sterling, & Spalding, 2011)
Miller Assessment of Preschoolers (Miller, 1988)	School Function Assessment (Coster, Deeney, Hal-tiwanger, & Haley, 1998) School Version of the Assessment of Motor and Processing Skills (Fisher, Bryze, Hume, & Griswold, 2005)	Vineland Adaptive Behavior Scales, 2nd Edition (Spar-row, Cicchetti, & Balla, 2005)		ABAS-3
Battelle Developmental Inventory, 2nd Edition (Newborg, 2016)	Bruininks- Oseretsky Test of Motor Proficiency, 2nd Edition (Bruininks & Bruininks, 2005)	COPM		
Peabody Developmental Motor Scales, 2nd Edition (Folio & Fewell, 2000)	Miller Function and Participation Scales (Miller, 2006)	Interest Checklist (Center for the Advancement of Distance Education, n.d.)		

Note. This is a sample of occupational evaluations by age. For more information or a more comprehensive list, refer to the *Occupational Therapy Practice Guidelines for Individuals with Autism Spectrum Disorder* (Tomchek & Koenig, 2016) or *Asher's Occupational Therapy Assessment Tools* (4th ed.; Asher, 2014).

in the street and, as a result, had difficulty attending the day treatment program on a regular basis. His diet consisted of chips and soda for each meal; he had difficulty with leisure skills in a social setting, budgeting, transportation, and grooming; and he had poor self-esteem. Areas that he wanted to improve on included making healthier meals to improve his health and lose weight. Adam's interests included making and listening to music and attending groups at the clinic. His parents sang with him when they were alive—he was a member of a chorus when he was young, and he was motivated to attend the music group at the clinic.

Through education, environmental modification, and practice shopping in the community, the occupational therapist helped Adam learn how to make more nutritious food purchases on a low budget. The therapist also helped Adam

clean and organize his home. Further, the occupational therapist encouraged Adam to join an occupational therapy–led music group to improve his self-esteem and self-expression. He thrived during the group, making friends with peers and expressing his musical ideas freely. He was motivated to attend the music group on a weekly basis, wrote a song about his parents and the challenges of growing up with a disability, and performed along with fellow music group members in various concerts for peers at the clinic. He began attending other groups as well, with occupational therapists facilitating peer interaction, resulting in peer relationships and social supports. Peers helped Adam see his relationship with his parents in a more positive way and, ultimately, he reported improvement in his self-esteem and self-worth.

Conclusion

Occupational therapy practitioners help clients with ASD throughout their life span and in a broad range of ways, reflecting the profession's distinct ability to address the many facets that make each person unique, regardless of who they are, their age, their condition, or any other factor. As time goes by, the importance and recognition of occupational therapy in helping individuals with ASD and their families should continue to grow, underscoring the need for therapists to be able to appropriately assess and address their needs. 📌

The authors wish to give special thanks to Sandra Schefkind, OTD, OTR/L, FAOTA, AOTA's Pediatric Program Manager, and the members of the Autism Work Group.

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For More Information



Autism: A Comprehensive Occupational Therapy Approach, 3rd Edition

By H. Kuhaneck & R. Watling, 2010. Bethesda, MD: AOTA

Press. \$44 for members, \$79 for nonmembers. Order #1213B.



Autism Topics Part II: Occupational Therapy Service Provision in an Educational Context

By R. Watling, 2014. Bethesda,

MD: American Occupational Therapy Association. Earn .6 AOTA CEU (7.5 NBCOT PDU, 6 contact hours). \$209 for members, \$289 for nonmembers. Order #OL4881.



Occupational Therapy Practice Guidelines for Individuals With Autism Spectrum Disorder

By S. Tomchek & K. P. Koenig,

2014. Bethesda, MD: AOTA Press. \$79 for members, \$158 for nonmembers. Order #900385. Ebook: \$49 for members, \$89 for nonmembers. Order #900462.



Autism Topics Part III: Addressing Play and Playfulness When Intervening With Children With an Autism Spectrum Disorder

By R. Watling, 2014. Bethesda, MD:

American Occupational Therapy Association. Earn .6 AOTA CEU (7.5 NBCOT PDU, 6 contact hours). \$209 for members, \$289 for nonmembers. Order #OL4884.

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Intensive Caring

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The waving of your heart beats
Float waves across the screen
Amidst all the machinery
You barely can be seen
Fragile, frightened little boy
With cries so faint yet shrill
There's no one here to hold you tight
So little boy I will

**Chorus: Doctors dance to the tune of the monitor chimes
Chanting children pay for societal crimes
Jesus whispers John look beyond the disease
My kingdom belongs to such as these**

Recalling myself as a little youth
Reveals for me an awesome truth
I know so well why my heart cries
Out to the little boy who tries
For me my journey has defined
The ways our struggles are entwined
Like the leads that from the start
Monitored your tiny heart
Still no monitor can perceive
How hands that give also receive
I hope my hands transmit the joy
You've brought to my life little boy

Chorus

The last time I saw my little friend
I knew his life had reached the end
The nurse who loved him shrilly cried
Our little angel now had died
I saw his body lying there
I felt much pain yet no despair
He gave so very much to me
Did I learn what he tried to have me see?
He got me to ask what it means to care
For another to be really there
His shrouded body uncovers a truth that is real
When we give of our whole self we truly heal

Chorus



LOVE IS IN THE AIR FOR OUR STAFF THIS SPRING!

Wedding Bells rang for DECI Staff Member, Debi Mahler, on March 20th. She and hubby, Seth, reside in Manchester Center, Vermont. Congratulations!

And... Paula Antunes became engaged to her boyfriend, Frank, while riding on the train to Washington, D.C., which was where they met 3 years ago! Best Wishes!

PNC Bank Awards Grant Funding for DECA Program Implementation

The Chester County Intermediate Unit Head Start Program, located in Coatesville, PA, recently learned that they were one of 12 Head Start programs to receive funding through the PNC *Grow Up Great* demonstration project grants. The PNC *Grow Up Great* Head Start Demonstration Project program is part of PNC's new ten-year, \$100 million investment to ensure that children enter school ready to learn.

Chester County Head Start submitted a proposal to fund full implementation of the DECA Program throughout their seven centers in suburban Philadelphia, with ongoing training and technical assistance from Devereux Early Childhood trainers. Because of their close proximity to the DECI headquarters, every classroom teacher will receive regularly scheduled visits from Devereux certified trainers who will provide onsite coaching and mentoring. (do we want to add "serving in the role of Local Program Mentor to staff?")

The Devereux Early Childhood team worked closely with Chester County from the onset, helping to write a proposal that would best meet the needs of the staff and families. According to Deb Miller, the Education Coordinator, "Our staff have seen the positive results of the DECA Program in addressing children's behavioral concerns and in helping them be better teachers."

The Devereux Early Childhood team knows that we will be learning valuable lessons from this project, and seeing positive results for children and classrooms! Look for updates from us in future newsletters and on the chat room!

Resource Corner:

- The National Center for Children in Poverty (NCCP) and partners, the Inter-University Consortium for Political and Social Research at the University of Michigan, and the Child Care Bureau of the U.S. Department of Health and Human Services have launched the Child Care

and Early Education Research Connections web site. Designed to serve researchers and Policymakers, the Research Connections web site is built on a relational database and includes a searchable research collection, data sets for secondary analysis, specially developed syntheses, and a 50-state data tool to compare policies within and across states.
<http://www.childcareresearch.org>

- Children's Book: *When I Feel Angry*, Written by: Comelia Maude Spelman, Illustrated by: Nancy Cote, Publisher: Albert Whitman Prarie Paperbacks, ISBN #: 0-8075-8879-0
- Teacher Resource: *Challenging Behaviors in Early Childhood Settings*, Authors: Bell, S., Carr, V., Denno, D., Johnson, L., Phillips, L, Publisher: Paul H. Brookes Publishing Co, ISBN: 1-55766-682-2. This resource is filled with classroom-based strategies, realistic vignette and classroom application sections that help readers assess their current practices and implement the suggested strategies. Further, this resource gives early childhood teams invaluable guidance on working with children with challenging behaviors and building positive relationships with their families.



Unique Usage of the DECA: Coupling DECA Results with Sensory Integration Information

**Submitted by Dr. John Pagano,
Mental Health Coordinator
Bridgeport, CT**

An advantage of the DECA Program is its ability to be customized to the needs of a particular program. Working as an occupational therapist and Mental Health Coordinator in a large Head Start program, I combine the Sensory Integration approach with the DECA Program to develop plans for improving preschoolers' social-emotional skills. Sensory integration intervention involves helping children process and combine sensory information for optimal functioning by accommodating to their sensory processing style^{1&2}.

Each individual has a unique sensory processing style.^{1&2} Helping preschoolers, parents, and teachers to understand and adapt to their sensory processing styles enhances adult-child interactions and learning². Research has begun to validate this theory of individual sensory processing styles³.

The Sensory Profile⁴ is useful for understanding and promoting learning in young children. Like the DECA, the Sensory Profile is a reliable and valid caregiver report measure that can be completed by the preschooler's parent or pre-school teacher. Also like the DECA, the Sensory Profile assesses the preschooler's sensory processing style, compares it to others their age, and provides recommendation for adapting the environment to promote learning.⁴ A sample report is provided to demonstrate how the Sensory Profile and DECA can be combined to promote social skills and learning in young children. It is best for early childhood educators, parents, social workers, and occupational therapists to work as a team when integrating the DECA and Sensory Profile to help young children.

Sample: Sensory and Social/Emotional Skills Assessment

GENERAL INFORMATION: John is a pleasant 5 year 3 month old who attends Central Head Start. He demonstrates significant behavioral problems in Head Start and receives services from this Mental Health Coordinator, Play Therapy with a Social Worker, and Parent Aid services at home. He also receives weekly educational services from the New Haven Schools.

BEHAVIORAL SUMMARY: John occasionally interacts with other children in his Head Start class, but seeks individualized adult attention. He tends to move rapidly and talk loudly, at times demonstrating loud talking with constant movement (e.g. jumping up and down in place). John's teachers reported that when upset he hits classmates and teachers, and forcefully hits or kicks the walls. John's teachers further reported that he most often has tantrums when he is not getting direct adult attention or a substitute teacher is in the room. When John is upset and aggressive he responds best to calm talking and redirection to activities in the class library seated on large cushions. John's mother reported that he is very active at home, demonstrating frequent tantrums and sleeping only 3-4 hours nightly.

DECA: The DECA (Devereux Early Childhood Assessment) was done by John's mother and preschool teacher. DECA scores from both John's mother and teacher's report indicated Total Protective Factor and Behavioral concerns. The protective factor of Attachment was a relative

strength for John (typical in the parent rating and a concern in the teacher rating). Self-control, Initiative, and Behavioral Concerns were concerns on both the parent and teacher versions of the DECA.

SENSORY PROFILE: John's mother completed the Sensory Profile, a parent report assessment administered by Child First. John's scores on the Sensory Profile indicated definite differences in his sensory processing skills. John's scores showed definite differences (-2 standard deviations, among the lowest 2% of scores) for the factors: Sensory Seeking, Emotionally Reactive, Inattention/Distractibility, Poor Registration, and Fine Motor/Perceptual. His overall performance suggests high thresholds for Vestibular processing, Modulation related to body position & movement, and Modulation of sensory input affecting emotional responses, as well as low thresholds for visual processing.

RECOMMENDATIONS:

1. Build on and use John's relative strength in attachment relationships to promote his self-control skills. For example, every few minutes establish eye contact with John while he is in a group setting, praising and telling him you will be over in one minute (then provide individual attention in one minute).
2. Minimize bright lights and visual distractions to promote John's attention to fine motor/perceptual activities (e.g. could try using a study carol to promote engagement in fine motor tasks).
3. Specific proprioception (deep pressure) activities can be used to assist John with reducing inappropriate behaviors and maintaining attention to learning tasks (e.g. heavy work activities like distributing books, therapist activities, hugs or deep pressure input through both shoulders done facing John).
4. Have a prepared quiet area set up with cushions and minimal distractions that John can be redirected to when he begins to get upset.

References

- ¹ Ayers, A.J. (1979). Sensory Integration and the Child. Western Psychological Services.
- ² Dunn, W. (2001). The sensations of everyday life: Empirical, theoretical, and pragmatic considerations. *American Journal of Occupational Therapy*, 55, 608-620.

³McIntosh, D.N., Miller, L. J., Shyn, V., & Hagerman, R. J. (1999). Sensory-modulation disruption, electrodermal responses, and functional behaviors. *Developmental medicine & Child Neurology*, 44, 608-615.

⁴Dunn, W. (1999). *Sensory Profile User's Manual*. The Psychological Corporation.

Web Resources

Sensory Profile www.sensoryprofile.com

Comments, Questions, Submissions for newsletters?

Email: kcairone@devereux.org; or call (610)542-3096

T-shirts or other free resources offered for those whose submissions are used!

DECA Program Users Highlighted: Stark County Childhood Resiliency Project, Canton, Ohio

The Stark County Childhood Resiliency Project is a strength-based, prevention and skill building program designed to provide services to vulnerable children, ages 2 to 6, as well as their childcare providers and families. The project was developed as a collaborative mental health and education service, involving local community mental health agencies serving children, the Stark County Community Mental Health Board and Stark County Family Council, which are units of government, and public and private childcare and preschool programs throughout the county, including Head Start. Major funding to initiate the project was provided through the Stark County Community Mental Health Board. Additional support was obtained through the United Way of Greater Stark County, The Hoover Foundation, and Ohio Department of Mental Health.

Early childhood staff had expressed concern about the growing number of children who display social, emotional and behavioral difficulties, and who are unprepared to make a successful transition to Kindergarten. Prior to the initiation of our project, few childcare programs had regular access to behavior interventionists or mental health consultants. The Stark County Childhood Resiliency Project provides prevention and skill building services including the DECA Program, delivered through early childcare programs. Our programming is available to all children enrolled in participating centers (universal level), and includes direct activities with children, training and classroom support for EC staff, and consultation and programming for parents/families.

In order to meet our goal of serving the most vulnerable children, childcare programs invited to an informational meeting about the program were identified utilizing the following guidelines:

- 1) Program serves child and families at or below 175% of nationally defined poverty levels. To obtain such information, we contacted the local Ohio Department of Jobs and Family Services, who provided information regarding the number of subsidized placements for childcare programs.
- 2) Program serves children under protective service contracts.
- 3) Programs had contacted local mental health agencies for consultation or services in the past, indicating an awareness and openness to early mental health intervention.
- 4) Program serves children who have experienced trauma, abuse/neglect, loss, frequent relocation, parental unemployment, single parent families without support, or other stressors.
- 5) Programs represent diverse areas of Stark County.

Center Directors are invited to Informational Meetings about our project, in which the programs, process and philosophy are discussed. Interested centers complete a questionnaire as part of the enrollment process, which helps them prepare to work with us as an active partner (i.e., planning ahead for possible difficulties in implementation, exploring staff readiness for participation, special needs, qualities the center will contribute to the overall success of the project, etc.). We complete a site visit and interview for each center, and participating centers sign a letter of agreement. A mental health consultant is assigned to each program, and will maintain that assignment to foster a sense of continuity, and be viewed as joining the center "team."

Our mental health consultant, or "Success Coaches", each coach completes training in resilience theory, risk and protective factors, child development and developmentally appropriate practice, environmental design, consultation skills, accessing community resources, cultural appreciation, mental health issues, developmental screening, the DECA, and the DECA system. The Director is a DECA Local Program Mentor. Success Coaches participate in weekly supervision to discuss strategies, interpret DECA's, develop child, staff and family learning activities, and support each other. Our Success Coaches are "front line" mental health consultants, who focus on consultation, training and skill building. Through our partnerships with children's mental health agencies (Child & Adolescent Services Center and Community Services of Stark County, Inc.), we can provide a smooth transition for those children or families who do require clinical mental health services. When a Success Coach first arrived at a center, they were often seen as the person to "help with the children with behavior problems." And, of course, many staff were initially concerned about how much extra work our project would require of them. Through the use of trainings and sharing of DECA materials, childcare staff began to recognize people whom they considered to be

Summer 1998

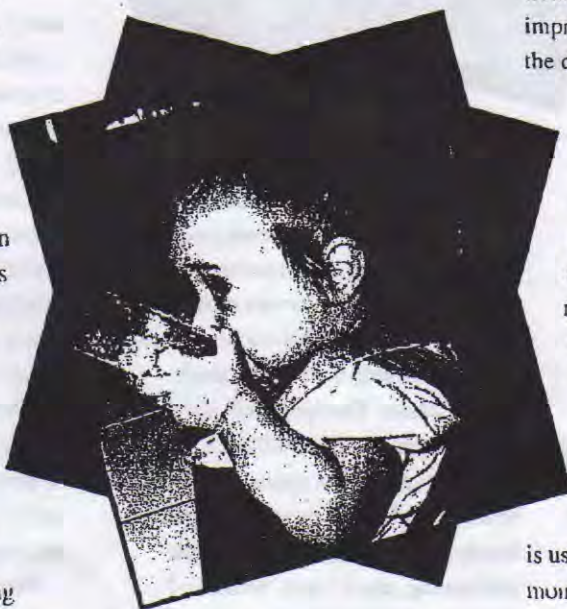
a publication of Connecticut's Birth to Three System and State Department of Education about resources, programs and issues related to young children having special needs and their families

Initial Considerations for Helping Your Infant Learn to Eat

Many children with developmental disabilities have eating problems. One study of children with cerebral palsy found that 40 percent had difficulties eating. Feeding problems may occur in one or more of the phases of the eating process. First, infants must take food or liquid into their mouths and transport it back for swallowing. Next, they must swallow the food. Finally, the food must be transported through the digestive system and be appropriately digested. Problems in any phase of eating, from difficulty with the initial suck to constipation, can interfere with eating.

The causes of a feeding difficulty may be a physical structure problem, fear of eating, abnormal movement, communication problems, difficulty with the sense of touch in the mouth, or difficulty learning to eat. Often more than one of these factors makes eating difficult. Parents have told me of their frustration with "expert" suggestions from extended family members, and even doctors or therapists, regarding what they are doing wrong that

is causing their child's eating problem. Feeding problems are not due to parental inadequacy; they are caused by signifi-



cant problems including those listed above. Parents have an in-depth feel for their child which enables them to learn to carry out treatment strategies with great skill once the problem is deter-

mined and appropriate treatment strategies are developed.

Recent studies show that infants do not outgrow eating problems without intervention. Difficulties with eating need to be improved, while simultaneously assuring the child is getting adequate nutrition for brain and muscle growth. Tube feeding and oral feeding are the two major ways to assure this, and choices regarding the use of tube feeding to supplement oral feeding are often challenging. If eating by mouth is medically unsafe or inadequate for providing adequate nutrition, a tube can be placed into the stomach through the nose (nasogastric tube) or directly inserted into the stomach (gastrostomy tube). The nasogastric tube is usually used for a period of three months or less. The gastrostomy tube is

(Please see Initial Considerations . . . on page 9)

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Initial Consideration for Helping Your Infant Learn to Eat

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preferable for long-term nutritional support, but requires an initial operation. Studies have shown increased weight and length in infants as a result of tube feeding. A physician can determine whether an infant's nutritional intake is adequate for his growth and development. Statistics are available to compare your infant's length and weight with a cross-section of infants of the same sex and age. Using this reference, the doctor can monitor growth over time as a guide for intervention decisions.

Parents may notice a variety of problems that may indicate their infant is having eating difficulties. Some infants have reflux, where the stomach content is frequently vomited back up after it has been mixed with stomach acid, causing a very unpleasant experience and possibly interfering with weight gain. Other infants resist not only feeding, but any touch on or in their mouths. Another possible indication of feeding problems is difficulty with the normal progression of eating skills. (Author's note: For premature infants, subtract the number of weeks early in considering these guidelines.) Newborns should suck liquid without coughing or choking. Infants can usually use their lips to remove food from a spoon by six months of age, and chew by one and half years of age. Physicians may want to conduct additional testing for stomach or swallowing problems if there is inadequate weight gain or inappropriate eating skills.

Feeding is a pediatric subspecialty, and it is important to seek out professionals with experience helping children with eating problems. For children with many physical problems requiring testing and specialists, it is helpful to find an experienced pediatrician to help you coordinate

treatment. Doctors who may be involved include developmental pediatricians, gastroenterologist, pulmonologists, and otolaryngologists. They can evaluate the medical causes of the eating problems (i.e., swallowing functions, food transport to the stomach) and may prescribe diet, medicine or surgery if indicated.



Occupational, speech and/or physical therapists are a valuable resource for evaluating feeding skill development, as well as managing and improving your child's eating skills. Parents reported that therapy, which included teaching them strategies to help their infant, made feeding easier. Therapists will assess the development of eating skills (i.e., taking food from a bottle or spoon, chewing) and develop goals in conjunction with the family. Treatment strategies include positioning, touch input, behavioral strategies, food suggestions, placement of food in the mouth, and game-like exercises. Treatment must be individualized by the therapist to the specific needs of your infant. Look for a therapist with recent graduate courses and experience in feeding and who you feel comfortable with as a person. Dietitians can also be a valuable resource for helping with diet suggestions

for weight gain and eating skill improvement. Everyone who works with your child should coordinate their efforts.

There are also several resources for learning about your child's problems and ways to help. Books and articles on the normal development of eating skills are the best place to start. Once you understand this normal progression, articles on treating feeding problems will be helpful. Several books, ERIC documents, and articles related to normal feeding and treatment of feeding problems are available. (Please see Informational Resources listing on page 7). Dysphagia, oral motor skills, and mastication are commonly used search terms for literature on feeding problems.

Many infants with a history of eating problems begin to demonstrate behaviors that interfere with eating, a problem referred to as conditioned dysphagia. The infant may learn to associate unpleasant consequences with eating, and refuse to eat even after all physical problems have been resolved. Avoiding force feeding and providing oral motor therapy for infants receiving tube feeding can help prevent this problem, but it may develop anyway. Social workers can assist you in coping with behavioral problems and provide support to better enable parents to assist their child. A combination of behavioral and oral sensory-motor strategies are often helpful with conditioned dysphagia.

Feeding is an important skill for survival and socialization, and serves as a foundation for other developmental areas. It is important to monitor your infant's growth and eating skill development and to get professional assistance when problems occur. The coordinated efforts of the family and all the professionals working with your infant is important to best guide him toward functional eating.

The Next Attention Deficit Disorder?

Thursday, Nov. 29, 2007 By CLAUDIA WALLIS Time Magazine



RAY NG FOR TIME
Article Tools

With a teacher for a mom and a physician's assistant for a dad, Matthew North had two experts on the case from birth, but his problems baffled them both. "Everything was hard for Matthew," says Theresa North, of Highland Ranch, Colo. He didn't speak until he was 3. In school, he'd hide under a desk to escape noise and activity. He couldn't coordinate his limbs well enough to catch a big beach ball.

Matthew, now 10, was evaluated for autism and attention deficit hyper-activity disorder, but the labels didn't fit. "We filled out those ADHD questionnaires a million times, and he always came out negative," Theresa recalls. "When we found this place, I cried. It was the first time someone said they could help."

This place is the Sensory Therapies and Research [STAR] Center, just south of Denver, which treats about 50 children a week for a curious mix of problems. Some can't seem to get their motors in gear: they have low muscle tone and a tendency to respond only minimally to conversation and invitations to play. Others are revved too high: they annoy other children by crashing into them or hugging too hard. Many can't handle common noises or the feel of clothing on their skin. A number just seem clumsy. Adults can remember kids like these from their own childhood. They were the ones called losers, loners, klutzes and troublemakers. At STAR Center they wear a more benign label: children with sensory processing disorder (SPD).

Never heard of it? You're in good company. Neither have many pediatricians, neurologists, psychologists and teachers. But in the parallel universe of occupational therapy, which focuses on the more primal "occupations" of life--dressing, eating, working, playing--SPD is

commonly treated. Last month, at a conference on SPD in New York City, 350 occupational therapists (OTs) and others gathered to hear about the latest research and therapies.

OTs have been treating SPD, also known as sensory integration dysfunction, since 1972, when A. Jean Ayres, a University of Southern California (USC) psychologist and occupational therapist, published the first book on the condition. As defined by Ayres and others, SPD is a mixed bag of syndromes, but all involve difficulty handling information that comes in through the senses—not merely hearing, sight, smell, taste and touch, but also the proprioceptive and vestibular senses, which tell us where our arms and legs are in relation to the rest of us and how our body is oriented toward gravity. Some kids treated for SPD can't maintain an upright position at a desk; some are so sensitive to touch that they shriek when their fingernails are trimmed or if they get oatmeal on their face. Sounds and smells can be overwhelming. When lawn mowers roar outside the home of Lizzie Cave, 4, a STAR child, she's been known to vomit.

Families that find their way to the STAR Center and other groups that treat SPD typically have traveled a long road to get there. Their common refrains: My doctor doesn't believe in SPD; teachers can't handle it; insurance won't pay for therapy. There's good reason for that. SPD is not listed in medical texts or in the Diagnostic Statistical Manual (DSM), the bible of psychiatric disorders. Doctors acknowledge sensory issues as a common feature of autism and a frequent feature of ADHD but not as a stand-alone disorder. Lucy Jane Miller, a former protégé of Ayres and head of the STAR Center, is spearheading a campaign to change that. She has organized a national effort to have SPD added to the next edition of the DSM, the fifth, due out in 2012. Earning a spot in the DSM V would make it easier for researchers to win grants, kids to get accommodations at school and families to be reimbursed for a course of treatment, which, at the STAR Center, often costs \$4,000.

To receive recognition, advocates must provide persuasive evidence that "this is not just part of autism or ADHD, that it's a better definition of what these kids are experiencing," says Dr. Darrel Regier, director of research for the American Psychiatric Association and vice chair of the DSM V task force. What's needed, says Regier, is a body of peer-reviewed studies that defines "a core set of symptoms, a typical clinical course" and, if possible, good treatment data.

SPD research so far is provocative but limited. "It's hard to get grants for a disorder that doesn't exist," laments Miller, whose recent book, *Sensational Kids*, offers a guide to both research and treatment. Many studies are flawed by vague criteria for identifying the condition, samples that include kids with other disorders, and an utter lack of standardized treatment.

But Miller and others have been slowly building a research base. Studies at her SPD Research Institute, adjacent to the STAR clinic, have identified neurological differences between children with sensory-processing problems and typical kids. In one set of experiments, electrodes are attached to children's hands to measure nervous-system activity in response to a series of stimuli that include a siren, a powerful wintergreen scent, the brush of a feather against the cheek--each repeated eight times. A healthy child will show a strong electrodermal response--basically a measure of sweating or stress--to the first exposure but will quickly habituate, showing little response to the final repetitions. Kids with one brand of SPD jump through the roof with every repetition. "It's as if they are stuck in fight-or-flight mode," says researcher Sarah Schoen.

Other experiments at the University of Colorado have found that kids with sensory problems have atypical brain activity when simultaneously exposed to sound and touch. And a 2006 study of twins at the University of Wisconsin gave evidence that hypersensitivity to noise and touch have a strong genetic component.

No one can say with certainty how many kids are severely affected by sensory problems, though preliminary work by Miller suggests it may be 1 in 20. A critical question is where to draw the line between what's normal and what's pathological (see sidebar). Studies conducted by Alice Carter, professor of psychology at the University of Massachusetts, Boston, suggest that 40% of children ages 7 to 10 are so sensitive to touch that tags in clothing annoy them, and 11% overreact to sirens. But no one would claim that all these kids have a sensory disorder. Carter thinks SPD is too vaguely defined for prime time in the DSM. Instead, she favors adding it to a section at the back of the manual on disorders that warrant further study. Granting it such provisional status would open the door to more research funds. Then, if validated, SPD could have a shot at being included in the DSM VI--due out somewhere around 2025.

But parents of children who are struggling today are not inclined to wait 18 years, so they spring for therapy that has only anecdotal validation. Treatment is highly individualized, but much of it involves guiding the kids to do more of the things they don't do easily and respond less to the things they can't abide. Lizzie Cave works on noise sensitivity by listening to a calibrated series of audiotapes. Jacob Turner, 3, improves his tolerance for food textures by playing with gooey concoctions and allowing a therapist to put them ever nearer his mouth. Families get instructions on how to adjust their children's "sensory diets" to help them function better at home and in school. Christopher Medema, 7, now puts a weighted blanket on his lap when he's doing seatwork at school. The steady pressure meets some of his need

for tactile input and helps him focus. His family has learned to accommodate his craving for motion. "He likes doing math flash cards standing on his head," says his dad, Steven.

As for Matthew North? He still looks a little limp while dangling from gym equipment, and the blue eyes peering above a sprinkling of freckles gaze warily at people he doesn't know.

But the boy who couldn't catch a beach ball last summer is now learning Tae Kwon Do and even soccer. "I saved a couple of goals," he admits, with a little prompting from Mom. That sounds an awful lot like recovery--from whatever it is that ails him.

ADHD Improves With Sensory Intervention

Science Daily (May 13, 2005) — Preliminary findings from a study of children with attention deficit hyperactivity disorder (ADHD) show that sensory intervention -- for example, deep pressure and strenuous exercise -- can significantly improve problem behaviors such as restlessness, impulsivity and hyperactivity. Of the children receiving occupational therapy, 95 percent improved. This is the first study of this size on sensory intervention for ADHD. Temple University Health Sciences Center (2005, May 13). Study Finds ADHD Improves With Sensory Intervention. *ScienceDaily*. Retrieved December 7, 2007, from <http://www.sciencedaily.com/releases/2005/05/050513103548.htm>

The Temple University researchers, Kristie Koenig, Ph.D., OTR/L, and Moya Kinnealey, Ph.D., OTR/L, wanted to determine whether ADHD problem behaviors would decrease if underlying sensory and neurological issues were addressed with occupational therapy. Their study, "Comparative Outcomes of Children with ADHD: Treatment Versus Delayed Treatment Control Condition," will be presented Friday, May 13, at the American Occupational Therapy Association meeting in Long Beach, Calif.

Children with ADHD have difficulty paying attention and controlling their behavior. Experts are uncertain about the exact cause of ADHD, but believe there are both genetic and biological components. Treatment typically consists of medication, behavior therapy or a combination of the two.

"Many children with ADHD also suffer from sensory processing disorder, a neurological underpinning that contributes to their ability to pay attention or focus," explained Koenig. "They either withdraw from or seek out sensory stimulation like movement, sound, light and touch. This translates into troublesome behaviors at school and home."

Normally, we process and adapt to sensory stimulation in our daily environment. But children with ADHD are unable to adjust, and instead might be so distracted and bothered by a sound or movement in the classroom, for instance, that they cannot pay attention to the teacher.

All of the 88 study participants, who are clients at the OT4Kids occupational therapy center in Crystal River, Fla., were taking medication for ADHD. Of the 88, 63 children each underwent 40 one-hour sensory intervention therapy sessions, while 25 did not.

Therapy techniques appeal to the three basic sensory systems: The tactile system controls the sense of touch, the vestibular system controls sensations of gravity and movement, and the proprioceptive system regulates the awareness of the body in space. Therapy is tailored to each child's needs and can involve such techniques as lightly or deeply brushing the skin, moving on swings or working with an exercise ball.

"We found significant improvement in sensory avoiding behaviors, tactile sensitivity, and visual auditory sensitivity in the group that received treatment," said Koenig.

"The children were more at ease. They could better attend to a lesson in a noisy classroom, or more comfortably participate in family activities," said Kinnealey. "The behavior associated with ADHD was significantly reduced following the intervention."

The research team, which included Gail Huecker, the director of OT4Kids, believes that sensory intervention affects the plasticity, or adaptability, of the brain to sensory stimulation. In this study, changes were seen within six months.

Parents can learn how to continue the techniques at home. Koenig also observed that through this study, parents learned to view the disorder and the behaviors through a different lens.

"It's easy for parents to look at ADHD and blame themselves or the child for the bad behavior," said Koenig.

The goal of ADHD treatment is to prevent failure in school, family problems and poor self-esteem. If not addressed early, the disorder can trouble sufferers into adulthood.

In its current study, the group is working with a total of 135 children who have ADHD. Children who did not receive occupational therapy during the study have been scheduled to receive it afterward.

Research

Study finds ADHD improves with sensory intervention

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How ADHD affects behavior

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Sensory therapy improves symptoms

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Parents can perform therapy at home

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- Eryn Jelesiewicz

FAB (FUNCTIONALLY ALERT BEHAVIOR) STRATEGIES

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FAB “Functionally Alert Behavior” Strategies synthesize environmental adaptation, sensory modulation, positive behavioral support, and physical sensory strategies to promote self-control in children with behavioral, developmental, sensory-motor, early trauma history, and/or psychiatric challenges. Aggression is a significant problem requiring effective intervention in children with developmental disabilities (Brosnan & Healey, 2011). Behavioral strategies are effective but do not significantly improve behavior in all children (Kazdin, 2008). Therefore, it is important that children demonstrating interacting behavioral, developmental, sensory-motor, early trauma history, and/or psychiatric challenges receive individualized comprehensive intervention (Ben-Sasson et al., 2009; Binnun & Golland, 2012; Chan et al., 2010; Corrado & Freedman, 2011; Green & Ben-Sasson, 2010; Koziol et al., 2011; Levit-Binnun & Golland, 2012; Paulus & Stein, 2010; Schiffman et al., 2009; Van Hulle et al., 2012).

FAB Strategies address the unique neuropsychological challenges affecting aggression and other serious behavior problems in children with developmental challenges including Autism Spectrum Disorders (Alexander et al., 2007; Canfield, 2008; Reynolds & Lane, 2011; Tomcheck & Dunn, 2007), intellectual disabilities (Richmond, 2008), and ADHD (Green & Ben-Sasson, 2010; Lane et al., 2010), as well as psychiatric (Schiffman et al., 2009, Chan et al., 2009), sensory-motor problems (Boyd et al., 2010; Cheng & Boggett-Carsjens, 2005), and early trauma history (Bauer et al., 2009; Cicchetti, 2010; Dolcos & McCarthy, 2006; Hanson et al., 2010; Henry et al., 2007; Teicher et al., 2004). Emphasis is placed on reducing the initiation of aggression by developing inhibitory control and functional communication skills (Raaijmakers et al., 2008; Riggs et al., 2006; Sweeney-Kerwin, 2007).

FAB Strategies provide an integrated synthesis of evidence based environmental adaptations (Diamond & Lee, 2011; LaVigna & Willis, 2005; Shapiro et al., 2009), sensory modulation (Ayles, 2005; Beider & Moyer, 2007; Greenland, 2010; Lane et al., 2010; Lieberman, 2010; Silva et al., 2011; Singh et al., 2007), positive behavioral support (Greenberg, 2006; Kazdin, 2008; Riggs et al., 2006; Stahmer et al., 2011; Sweeney-Kerwin, 2007), and physical sensory activities (Pfeiffer et al., 2011). The inclusion of goal attainment scoring and a protocol manual in FAB Strategies facilitates efficacy research (Miller, Coll, & Schoen, 2007). FAB Strategies offers a practical method for implementing the coordinated transdisciplinary intervention recommended for children with Autism Spectrum Disorders and early childhood trauma histories (Blaustein & Kinniburgh, 2010).

The FAB Strategies form provides a written foundation for specifying and monitoring goal-directed intervention across settings. The FAB Strategies to Promote Self-Control form is used for children six years and older, while the FAB Strategies for Pre-K and Kindergarten Children form is used for three through six year olds. Either form can be supplemented using the FAB: Environmental Adaptations, Pressure Touch (Pagano, 2005), and Strategies to Improve Oral Eating form (Pagano, 1996).

The most important component of FAB Strategies is development of functional goals to guide, monitor, and improve self-control (Lieberman, 2007). One to three goals are specified at the top of the FAB Strategies form. The goals are desired behaviors incompatible with aggression such as keeping safe hands or using polite language (Kazdin, 2008). FAB Strategies is individualized to help children achieve their functional goals. Baseline data regarding frequency of goal related behavior is gathered before program implementation. The FAB Strategies form guides

development of the program and allows for individualization.

A trained teacher, occupational, physical, speech, and/or mental health therapist individualizes the goal and FAB Strategies selection in conjunction with the transdisciplinary team. The individualized strategies for use by the family and all other team members are checked off and underlined on the FAB Strategies form. Strategies listed in bold print are marked with an X for use by trained occupational, physical, and speech therapists. Two blanks on the bottom of the FAB Strategies form allow team members to add strategies contributing to goal attainment.

The four sections of the FAB Strategies form labeled A-D guide selection of the individual strategies used. Sections A-D sequentially list: A. Environmental Adaptations B. Sensory Modulation C. Positive Behavioral Support, and D. Physical Sensory Strategies. When choosing individualized FAB Strategies for a child include at least one strategy from each section. Initial selection of the FAB Strategies to be used is guided by the child's motivation and goal related behavior following completion of the strategies. Intervention utilizing FAB Strategies can be implemented in any order. Alternating active movement with seated strategies is recommended.

Section A environmental adaptations provide the structural foundation for FAB Strategies. The child's response related to his functional goal guides the use of environmental adaptations (Blaustein & Kinniburgh, 2010; Lieberman, 2007). Section A environmental adaptations include adaptive equipment such as fidgets (Fortel-Daly et al., 2001; Hotz et al., 2006; LaVigna & Willis, 2005; Ospina et al., 2008; VandenBerg, 2001), visual schedules (Jaime & Knowlton, 2007; Schneider & Goldstein, 2009) and adaptive techniques (Reynolds & Lane, 2007; Schoen et al., 2009).

Environmental enrichment through adaptive equipment, visual schedules, and adaptive techniques reduces aggression in children with behavioral challenges and developmental disabilities (Brosnan & Healey, 2011; LaVigna & Willis, 2005; Schneider & Goldstein, 2009). When developing environmental adaptations, it is important to consider the dynamic relationship between the child's behavioral, sensory, cognitive, and environmental challenges (Cheng & Boggett-Carsjens, 2005; Henry et al., 2007). Environmental structure and behavioral demands are interacting variables, with greater sensory demands suggesting the need for more structure. When children show improved self-control or demands are decreased, structure is reduced to promote independence.

When children demonstrate sensory sensitivity and anxiety it is important that environmental adaptations address both difficulties (Pfeiffer, 2012). Environmental adaptations are most helpful when they are individualized for achieving the child's goals. The Sensory Profile and Pagano FAB Trigger and Coping Forms are useful assessment tools for identifying effective environmental adaptations. Understanding the child's unique sensory processing helps the therapist analyze, adapt, and modify daily routines for improved functioning (Dunn, 2007). For example, comfort bags containing preferred sensory equipment helps improve behavior in challenging school and home environments.

Introducing environmental adaptations one at a time is helpful for judging their efficacy in achieving the child's goals. If extensive or detailed environmental adaptations are needed the FAB Environmental Adaptations form is attached as a supplement to the FAB Strategies form. The parent/guardian indicates that they understand and approve of all environmental adaptations before they are introduced by signing the FAB Environmental Adaptations or FAB Strategies form.

A functional behavioral analysis “FBA” is often useful for gathering base line data, developing goals, and determining the efficacy of adaptive equipment. FAB Strategies uniquely emphasizes attention to sensory antecedents (e.g., transition times, crowding, available objects, activity levels, smells, noise level). Research supports substituting preferred adaptive equipment or techniques matching the sensory input of and incompatible with problematic stereotypic behaviors.

When a FBA shows that the stereotypic behavior interferes with learning and is not being done for social reinforcement, the child can be given adaptive equipment providing matched sensory input then receive reinforcement for refraining from the stereotyped behavior (Feeley & Jones, 2006; Higbee et al., 2005; Richman, 2008; Smith et al., 2005). For example, the FBA showed that a child repetitively mouthed his hand for oral input, but that this behavior interfered with learning and could harm his skin. He was given a chewy to use and was praised for not mouthing his hand for progressively longer predetermined periods of time (Higbee et al., 2005). The integrated use of environmental adaptations and behavioral strategies can be specified in a behavior plan written jointly by a Certified Behavior Analyst and Licensed Occupational Therapist.

Visual schedules help children with developmental disabilities learn to conform to social expectations (Jaime & Knowlton, 2007; Schneider & Goldstein, 2009). Written and/or picture schedules can help children understand rules, schedules, routines, transitions, and reinforcement contingencies (Diamond et al., 2007). Schedules can be reviewed before high risk situations (such as lunch time or assemblies where the child has previously been physically aggressive) to direct implementation of a comprehensive pre-correction strategy.

Section B sensory modulation strategies enhance self-control. Section B includes body awareness, basic mindfulness (Baime, 2011; Bhatia et al., 2012; Biegel et al., 2009; Greenland, 2010; Flook et al., 2010; Miller et al., 2007), touch (Beider & Moyer, 2007; Perry, 2009; Silva et al., 2011), and motor self-control strategies (Riggs et al., 2006; Smith et al., 2005). The Pagano FAB Trigger & Coping forms use pictures visually representing common environmental and body triggers as well as sensory coping strategies for children with behavioral, developmental, and sensory challenges (Mass. Dept. of Mental Health Safety Tool, 2006).

Based on emerging clinical and neurological research linking motor self-control to improved inhibitory control and reduced aggression (Hanstede et al., 2008; Lieberman, 2010), several section B strategies address motor inhibition. FAB Strategies to improve motor self-control include: red light-green light, freeze dance, freeze shake, giant steps, Simon says, Play Plan-Review, and social role play (Berkowitz, 2008; Blair & Diamond, 2008; Lieberman, 2010; Raaijmakers et al., 2008; Riggs et al., 2006; Rubia et al., 2008).

Several strategies are also included based on emerging evidence that mindfulness skills increase attention span and improve self-control in children (Napoli et al., 2005), particularly those with initial self-control difficulties and a diagnosis of ADHD (Flook et al., 2010; Rubia, 2009). Mindfulness activities also reduce physical and verbal aggression in children and adolescents (Flook et al., 2010; Singh et al., 2007). FAB Strategies involving basic mindfulness include: focus on the bottom of the feet (Singh et al., 2007), focus on the palms, tense and relax muscles, nose breathing, mindful clock, and the bird (Flook et al., 2010; Greenland, 2010; Stoller et al., 2012).

Because anxiety can increase children’s learning and behavior problems, FAB Strategies include many touch activities. Firm pressure touch significantly reduces anxiety in typically developing children as well as children with developmental disabilities (Beider & Moyer, 2007; Field, 2010).

Individually graded touch and movement activities, which activate proprioceptive receptors, facilitate social and learning skill development in children with Autism Spectrum Disorders (Izawa et al., 2012; Koester, 2012). Preschoolers with Autism Spectrum disorders have significantly more sensory modulation difficulties and show significantly improved sensory processing and behavior following specific deep touch pressure (Piravej et al., 2009; Silva et al., 2009). Children with Autism who are hyper-responsive appear to benefit from sensory processing intervention (Schaaf & Miller, 2005), while both hyper and hypo-responsive preschoolers show significantly improved behavior and sensory processing skills following firm pressure touch taught from their parents (Silva et al., 2011). The Pagano FAB Pressure Touch Strategies form can be attached to the FAB Strategies form to more fully describe touch strategies.

Section C positive behavioral control strategies address behavioral and communication skills (Crozier & Sileo, 2005; Kazdin, 2008; Riggs et al., 2006; Wood et al., 2009). Learning social and communication skills significantly improves the behavior of children with developmental (Lentini et al., 2005; Sweeney-Kerwin, 2007) and behavioral challenges (Thayer, 2007). Functional communication can be supported and rewarded through socially embedded reinforcers. For example, when a child says or signs “jump” the therapist would immediately take the child’s hands and jump with the child (Koegel et al., 2009).

Learning sign language and verbal mands significantly reduces aggression and improves behavior (Ospina et al., 2008; Sautter & LeBlanc, 2006; Sweeney-Kerwin et al., 2007). Practice saying is a similar technique for higher functioning children (Greene & Ablon, 2006). For example, if a child becomes upset and swears when requesting to have the tags removed from his shirts, he learns when calm to request "Please cut off my shirt tag" and is immediately assisted after using this phrase functionally.

Conditioning calm recall is a unique FAB Strategy utilizing classical conditioning to decrease aggression in children with severe developmental disabilities. Conditioning calm recall involves repeatedly pairing an unconditioned calming stimulus (e.g., specific movement, deep pressure touch activity) with a conditioned stimulus (e.g., a specific scent or song) during the child's regular occupational, physical, and/or speech therapy sessions. Whenever the child is exposed to environmental triggers or shows body triggers the conditioned stimulus is immediately applied and the child is given tangible reinforcement for avoiding aggression over progressively longer periods of time. This helps nonverbal developmentally disabled children learn to behave less aggressively (Lieberman, 2010).

Coping cards is a unique FAB Strategy that concisely integrates the child's preferred interests, behavioral goals (Spencer et al., 2008), environmental adaptations, and reinforcement schedules (Gray & Atkins, 2010). Coping pictures can be drawn or cut out from the Pagano FAB Triggers & Coping forms and pasted on an index card. The finished coping card is a laminated index card containing a goal incompatible with aggression (Kazdin, 2008), preferred interest or character (Spencer et al., 2008), picture of adaptive equipment and/or techniques, and schedule for earning tangible reinforcement.

For example, the child who bites could construct a coping card with a drawing of his preferred interest Sponge Bob, coping pictures of the chewy and noise cancelling head phones colored and pasted on (from the FAB Trigger and Coping forms), with the written caption: “Sponge Bob keeps a safe mouth during one activity earning a sticker, he can bite his chewy and use his head phones, 5 stickers= 1 toy car". The coping card teaches and reminds the child and all staff of the child's behavioral goal, preferred object, coping strategies, and reinforcement schedule.

Using Stories & Partial Sentences to Promote Appropriate Behavior

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Purpose-Stories can be used to describe the relevant social cues of a skill or situation. Stories for young children usually total 2-12 sentences. The story uses descriptive sentences that present objective information. The story may also contain directive sentences. A directive sentence guides appropriate behavior by suggesting responses to a situation. It is helpful to start directive sentences with *I will try to remember to ...* or *I will try to...* so emphasis is placed on effort not outcome. The story needs at least twice as many descriptive as directive statements (Gray, 2009).

Steps in Story Writing

1. **Introduction**-Defines the topic clearly. *Sometimes my class has opening circle.*
2. **The Body**-Adds details. *Opening Circle is a time to name the day of the week, describe the weather, and sing the hello song to each person in class. After the teacher asks a question she chooses one child to give the answer. It is okay to raise your hand if you think you know the answer. It is also okay to not raise your hand if you do not think you know the answer.*
3. **Conclusion**: Reinforces and summarizes, restating the purpose with the benefit of additional information. *At Opening Circle our class describes the day of the week, the weather, and sings the hello song* (Gray, 2009).

Frequently Useful Stories

Leaving class to go to occupational therapy
Returning to class after occupational therapy
Going to the doctor
Going to the dentist
Going to the zoo
Getting a hair cut

Partial sentences-Resembling fill in the blank statements, partial sentences encourage children to predict the next step, guess the response of another person, guess their response, or demonstrate the understanding of a new concept.

Right now I feel _____.

When I feel angry I can _____.

During recess I can choose to _____.

Mary will feel _____ if I share with her.

There are many things to stay when I meet a new student. Here's my list:
(Gray, 2009).

Gray, C. (2009). How to teach social stories.

Bilateral moves combines sequential bimanual movement (e.g., hand to hand transfer then under hand tossing of a bean bag) with the verbal expression of feelings to promote social skills (Bengtsson et al., 2005; Chiappedi & Bejor, 2010; Miller et al., 2007; Riggs et al., 2006; Sun et al., 2007). There are several FAB Strategies bilateral moves activities: favorites, guess the feeling, I feel, feeling intensity, and I messages. This process of labeling feelings during mindfulness to the present can also promote emotional modulation (Singh et al., 2008).

Section D physical sensory strategies promote attention, behavior, and social skills through cardiovascular (Buck et al., 2007; Diamond & Lee, 2011; Lang et al., 2010; Ratey, 2008; Thompson, 2011), dynamic balance (Bart et al., 2009; May-Benson & Koomar, 2007; Reynolds & Nicolson, 2007) sensory motor (Gabriels et al., 2008; Gal et al., 2010; Kaiser et al., 2010; Mailloux et al., 2011; Miller, Coll, & Schoen, 2007; Parham et al., 2011; Pfeiffer et al., 2011; Schaaf & Miller, 2005; Smith et al., 2005; Smith & Sheya, 2010; Tomcheck & Dunn, 2007), and sequential bilateral tasks (Ayres, 2005; Koester, 2012; Sun et al., 2007). Children with developmental challenges are motivated to participate in sensory activities, making them an effective means for promoting behavioral change (Koegel et al., 2009; Parham et al., 2011; Pfeiffer et al., 2011). FAB Strategies attend to a child's arousal level so he can play without becoming overly excited (Reynolds & Lane, 2011). For example, if a child rates his energy level as "uncomfortably high" following play ground tasks he is assisted in calming down before returning to class.

FAB Strategies is integrated into the child's daily educational, clinic, and family routines. After 8 weeks of regularly using FAB Strategies goal progress is objectively reassessed through comparing current with initial base line goal data. Based on this reassessment the team continues, modifies, or discontinues the individualized FAB Strategies. Goals can be revised, new baseline data gathered, and the new date and revisions noted on the FAB Strategies form (Hodgetts & Hodgetts, 2007; Pfeiffer et al., 2011). Every team member is given the current FAB Strategies form to encourage coordination of the program across disciplines.

FAB Strategies is a practical transdisciplinary intervention supported by research. It provides parents, teachers, as well as occupational, physical, speech, and mental health therapists with a practical framework for coordinated behavioral intervention. FAB Strategies allows for individualization, specifies the goal progress and intervention methods used, and allows for the assessment of transdisciplinary intervention efficacy (Hodgetts & Hodgetts, 2007; Parham et al., 2007; Pfeiffer et al., 2011).

FAB STRATEGIES® PRE-K & KINDERGARTEN FORM

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Student: _____ Date(s): _____
Teacher/Therapist: _____ Contact: _____
Goals: _____

A. ENVIRONMENTAL ADAPTATION

- ___ **Weighted-Blanket-Vest-Pressure-Shorts/Pencil grip/Clip-Slant board/Chewy/Ear press**
- ___ Sit: Stable-Separate-Near teacher-Carol-Disk-Therapy ball on a cradle/Headphones
- ___ Prepare-Limit Transitions/Trays/Carpet square/Fidgets/Comfort Box-Bag/Sensory coping area
- ___ Visual: List-Picture Schedule-If then/Decrease, then if needed gradually increase sensory input
- ___ Choosing one activity from 1 2 3 4 choices; do ___ minutes minimum; clean up before next task

B. SENSORY MODULATION

- ___ Arousal level-Color-Scent/Anger meter/Feeling wheel/Feelings vs. behavior/Coping strategies
- ___ Circles: Neck-Shoulders-Hips/Tense & relax/Breathing: Hand-Bird/Mindful clock: Sitting-Standing
- ___ Wall: Press-Pushups-Marine/Deliver: Message-Box/Kindness/Body scan/Hokey pokey
- ___ Beans-Rice/Theraplast/Sand/Water/Playdoh/Glue/Shaving cream/Rolling to Read-Math/X/Spine walk
- ___ **Touch vibration: Back-Arms-Body/Head crown-Shoulders Squeeze-Press/Spine roll**
- ___ **Roll therapy ball-Core/Back tech: Tap-Press/Sit supported on therapy ball-Mindful clock**

C. POSITIVE BEHAVIOR SUPPORT

- ___ Freeze: Shake-Dance/Red Light/Giant steps/Simon says/Social role-playing/Bully proof
- ___ Character comic/Coping card/Desensitization/Sensory matching/Sensory coaching
- ___ FAB Turtle/Priming/Breaks/Ask permission to kid-Touch/Intersperse learned/Social role-playing
- ___ Play Plan-Review/Scaffolding writing/Pre-Correction/Redirection/Break-Mand/Tolerance for delay
- ___ Reinforce: Attempts-Specific praise-Point chart-Tangible-Conditioned calm recall

D. PHYSICAL SELF-REGULATION

- ___ Playground-Structure/Exercise band activities/Beanbag pass/Jump on a mini-trampoline
- ___ Prone on therapy ball: Hands rock-Wheelbarrow walk/Ball: Wall-Quadruped pass-Roll therapy ball
- ___ Diagonal-X-Infinity-Symmetry/Both-One hand-Same side knee-Opposite side knee
- ___ **Crash pad/Mat sandwich/Scooter: Push-Pull-Down ramp/Therapy ball activities**
- ___ **Suspended Swing: Forward & back-Vertical-Lateral-Spin**

___ Activity: _____

___ Activity: _____

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References: Domitrovich et al., 2013; LaVigna & Willis, 2012; Laugeson, 2014; Stahmer et al., 2011

Parent/guardian Signature Supporting Program: _____

FAB SENSORY COPING AREA LOG

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Child: _____
Staff: _____
Date: _____ Time: _____
Sensory quiet area use suggested by: Child _____ Staff _____

Circle Entering Level of Upset

1 2 3 4 5 6 7 8 9 10
CHILLIN Medium Angry **AGGRESSIVE**

Behavior before comfort room use: _____

Environment (Check items used)

Dim lighting _____ *Pup tent* _____
Noise canceling head phones _____
Weighted blanket _____ Weighted vest _____ Weighted shawl _____
Bean Bag Chair _____
Music _____ *Programs/CDs:* _____
Lycra pressure vest _____
Rocking Chair _____ *Body Sox* _____
Aromatherapy _____ *Scent:* _____
Other _____

Activities (Check items used)

_____ *Decrease then graded increase sensory-Increase structure-Speak slow-Calm face*
_____ *Stretch: Up-Side-Twist-Down-Forward*
_____ *Nose breathe-Out: double in fist thumb-Tense & relax*
_____ *Pushups: Wall-Knee-Marine wall-Regular*
_____ *Theraband-Exercise tubing: Forward, Down, Cross Midline*
_____ *Self brushing-Isometrics: Up & Down-Center-Down*
_____ *Talk with staff-Specific peer-Telephone family*
_____ Steam roller deluxe Time in up to: _____
_____ *Favorite Toys Type* _____
_____ *Therapy putty-Wiki Stix-Crafts Type:* _____
_____ *Fidget-Vibrating toys Type:* _____
_____ *Therapyball: Bounce seated-Push ups-Rock on hands-Wheelbarrow walk*
_____ *Chewey Type* _____
_____ *Mini-trampoline jumping-Punch heavy bag*
Other _____

1 2 3 4 5 6 7 8 9 10
CHILLIN Medium Angry **AGGRESSIVE**

Behavior after comfort room use: _____

FAB Strategies® Pre-K & Kindergarten Form
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X-Therapist ✓-Staff & family A-Attachment Circle-Equipment given

Client: _____ Therapist: _____ Contact _____
Functional Goals: _____ Dates: _____

A. ENVIRONMENTAL ADAPTATION

- ___ Sensory coping area/Prepare-Limit-Transitions/Low noise/Headphones/Fidget-Comfort Box-Bag
- ___ Pencil grip/Desk: *Stable-Separate-Near teacher-Carrel-Clipboard-Slant board-Disk-'O'-Sit*
- ___ Visual: *List-Schedule-If then-Schedule story-Calm face/Slow: Speech-Pace*
- ___ Choice of 1 activity from 1 2 3 4 choices; do ___ minutes minimum; clean up before next
- ___ **Ear Press/Weighted-Blanket-Pressure-Vest/Chewy**

B. SENSORY MODULATION

- ___ Move: *Head-Shoulders-Hip circles/Tense & relax/Breathing: Hand-Bird-Mindful clock-Paint*
- ___ Self-touch: *Head-X hands shoulder squeeze-Arms-Legs-Toes/Energy ball/Kindness*
- ___ Arousal levels-Modulate/Freeze dance/Simon says/Giant steps/Deliver: *Books-Messages-Box*
- ___ Touch: *Beans-Rice-Therplast-Playdoh-Sand-Kinetic Sand-Floof-Water-Glue-Shaving cream*
- ___ Vibration-Brushing: *Back-Arms/Head crown/Shoulders: Squeeze-Press/Spine roll/Back X*
- ___ **Supported sitting therapy ball: Forward & back-Up & down-Sides-Mindful clock**
- ___ **Roll therapy ball-Core-Breathe/Deep pressure/Back tech: Press-Tap**

C. POSITIVE BEHAVIOR SUPPORT

- ___ Ask permission to kid-Touch/Prompt speech filter in head/Invite/Still like you/Orienting/Redirect
- ___ Practice say/Coping card/FAB turtle/Humor/Tolerance for delay/Desensitization/Partial sentence
- ___ Preferred task/Choices/Mand-Break/Intersperse learned/Priming/Prompts/Conditioned calm
- ___ Reinforce: *Good attempt-Appropriate-Point chart-Tangible/Sensory match/Social role-playing*

D. PHYSICAL SELF-REGULATION

- ___ Push Wall-Wall pushups/Prone on therapy ball: *Hands rock-Wheelbarrow walk/Mini-trampoline*
- ___ Hand: *Both to knees-Same side knee-Opposite knee/Draw: Diagonals-X-Infinity-Barrier circle*
- ___ Ball: *Wall-Letter-Quadruped pass-Bat/Beanbag pass/Playground-Structure/Exercise band*
- ___ **Crash Pad/Scooter board: Pull-Push/Suspended Swing: Forward-Back-Lateral-Spin-Target**
- ___ Activities: _____
- ___ Activities: _____

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Parent/guardian Signature Supporting Program: _____

FAB Strategies® Form

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X-Therapist ✓-Staff & family A-Attachment **Circle**-Equipment given

Client: _____ Therapist: _____ Contact: _____
Functional Goals: _____ Dates: _____

A. ENVIRONMENTAL ADAPTATION

- ___ Sensory coping area/Prepare-Limit-Transitions/Low noise/Headphones/Fidget-Comfort Box-Bag
- ___ Desk: *Stable-Separate-Carrel-Near teacher-Theraband-Disc-'O'-Sit-Clipboard-Slant board*
- ___ Visual: *List-Schedule-If then-Calm face/Slow: Speaking-Pace*
- ___ Choice of 1 activity from 1 2 3 4 choices; do ___ minutes minimum; clean up before next activity

B. SENSORY MODULATION

- ___ Move: *Head-Shoulders-Hip circles/Tense & relax/Mindful clock-Sitting-Standing/Feel your feet*
- ___ Slow breathing: *Hand-Paint wall-Flower & candle-Trace fingers-Squeeze fingers-Energy ball*
- ___ Self-squeezing: *X hands shoulder squeeze-Arms-Hands-Legs-Feet/Self-tapping: Ears-Hand-Palm up*
- ___ Arousal level/Deliver: *Books-Message-Box/Freeze dance/Giant steps/Simon says/Self-brushing*
- ___ Touch: *Beans-Rice-Theraplast-Playdoh-Sand-Kinetic sand-Water-Floof-Glue-Shaving cream*
- ___ Kindness/4-4-6-2/Head crown/Shoulder: *Squeeze-Press/Spine roll/Back X/Spine Crawl*
- ___ **Brushing-Vibration: Back-Arms/Roll therapy ball-Core-Slow breathing/Back tech: Tap-Press**
- ___ **Ear Press/Weighted-Blanket-Pressure-Vest/Chewy/Ice/Heat/Vibrating seat/Steam Roller Deluxe**

C. POSITIVE BEHAVIOR SUPPORT

- ___ Ask permission to kid-Touch/Prompt head filter/Invite/Still like you/Orienting/Redirection
- ___ Conditioned calm/Mand-Break/Sensory match-Coaching/Desensitization/Practice saying
- ___ Pre-correction/Self-management/Tolerance for delay/Coping card/FAB Turtle/Humor/Partial sentences
- ___ Preferred: Tasks-Distractor/Choices/Intersperse learned tasks/Priming/Prompts
- ___ Reinforce: *Good attempt-Appropriate-Point chart-Tangible-Desensitization-Self-management*

D. PHYSICAL SELF-REGULATION

- ___ Push wall/Wall-Pushups/Exercise band activities/Pull-up/Cardio machine/Weight lift/Punch heavy bag
- ___ Prone on therapy ball: *Hands rock-Wheelbarrow walk-Fly/Playground-Structure*
- ___ Flex-extend shoulder-ankle: *Same-Opposite-Opposite add same shoulder half up & down-Close eyes*
- ___ Hand: *Both-Same side knee-Opposite knee-Same side knee with eyes down right-Opposite eyes up left*
- ___ Diagonal-X-Alternate infinity I-Infinity-Infinity visually track-Pre twist-Elbow I-Post twist-Symmetry
- ___ Ball: *Wall-Letter-Quadruped pass-Bat-Bounce activities/Beanbag pass activities/Mini-trampoline jump*
- ___ **Supported sit on therapy ball: Forward & back-Up & down-Sides-Mindful clock**
- ___ **Crash Pad/Scooter board: Pull-Push/Suspended Swing: Forward-Back-Lateral-Spin-Target**
- ___ Activities: _____
- ___ Activities: _____

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References: Domitrovich et al., 2013; Koester, 2012; LaVigna & Willis, 2012; Stahmer et al., 2011

Parent/guardian Signature Supporting Program: _____

FAB PRESSURE TOUCH FORM *Part 1*

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Client: _____ **Date:** _____
Therapist: _____ **Contact Therapist:** _____
Functional Goal: _____

The FAB Pressure Touch Form is an addendum providing a detailed description of the pressure touch strategies listed on the FAB Strategies® Form. A therapist initially individualizes any pressure touch strategies that can help the client achieve their goals. Before implementation, the therapist assures that the client doesn't have abrasions, skin problems, osteoporosis, unstable joints, or other conditions that make pressure touch contraindicated. The therapist also obtains parental and client's consent for using the pressure touch strategies, and modifies or discontinues them if the client resists or dislikes the touch.

Base line data is collected regarding client goals that research supports could be helped by pressure touch strategies (e.g., decreased anxiety, improved behavior). The therapist can mark which pressure touch strategies to use on the FAB Pressure Touch Form, and use the letter key to specify the type of pressure touch input: **P**-Deep pressure; **T**-Tapping rapidly, **B**-Brushing, **V**-Vibrating bath brushing, **C**-Joint compression, **Tr**-Traction separating two joints, **M**-Movement described, or **Tow**-pressure with a slowly dried towel. Verbally identifying body parts as they are touched can be helpful for improving body awareness. Accompany or immediately follow pressure touch with functional activities related to goal attainment. Regularly monitor for skin abrasions or color change.

Once the therapist is implementing useful touch pressure strategies, they can be taught to the family, teachers, and other therapists for consistent implementation across settings. The FAB Pressure Touch Form provides a detailed description of the individualized touch pressure strategies included in home programs. There is no set minimal frequency of application needed for goal attainment, and pressure can be applied over clothes or directly on the skin. Pressure touch strategies are most effective when embedded in the clients' daily routine.

I. Progression Strategies (introduced sequentially):

1. **Back Press** (apply pressure downward, on each side of the spine)
2. **Arm Press** Back of the arm: a1) Fingers to shoulder a2) Shoulder to fingers
b) Volar surface shoulder to palm
3. **Arm Compression 10 sec.** (shoulder 80°, elbow 85°, wrist 90°)
4. **Leg Press** (down lateral border of thigh & calf, then top of the foot)
5. **Leg Compression 10 sec.** (above knee down, then below knee into hip)

II. Options Strategies: (any order):

- | | |
|-----------------------------------|-----------------------------------|
| 1. Head Crown _____ | 2. Scapula Squeeze _____ |
| 3. Shoulders Squeeze _____ | 4. Shoulders Press _____ |
| 5. Spine Roll _____ | 6. Arm Roll Activity _____ |
| 7. Arm Roll _____ | 8. Arm Wave _____ |

PAGANO FAB PRESSURE TOUCH STRATEGY *Part 2*

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Client: _____ **Date:** _____

III. Back Tech: Tap 10 X And then/OR Press 10X

ONE HAND:

- a. Top of the head _____
- b. Back of the head _____
- c. Back of the neck (gently contouring) _____
- d. Down the spine _____

TWO HANDS:

- e. Back of the Thighs _____
- f. Back of the calves _____
- g. Back of the feet _____

Reference Video: <https://www.youtube.com/watch?v=MviTjCz7-38>

IV. Tap self: Fingers to ear _____

- a. Tap on the back of the hand b. Tap up the arm c. Tap on the shoulder
- d. Tap on the neck e. Tap around the ear f. Tap on the neck (gently contouring)
- g. Tap on the shoulder h. Turn palm up and tap down the arm to the palm

V. Press self: Fingers to ear _____

- a. Press on the back of the hand b. Press up the arm c. Press on the shoulder
- d. Press on the neck e. Press on the ear f. Press on the neck g. Press shoulder
- h. Turn palm up and press down the arm to the palm

VI. Tap self: Head to feet

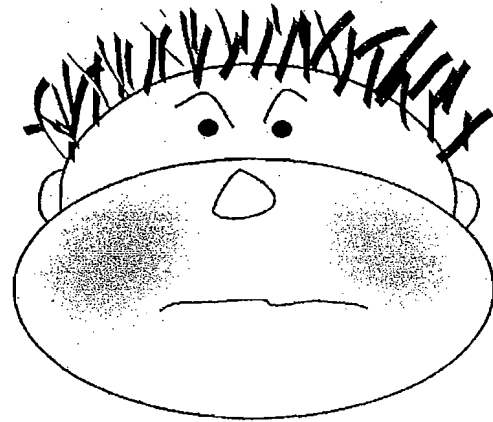
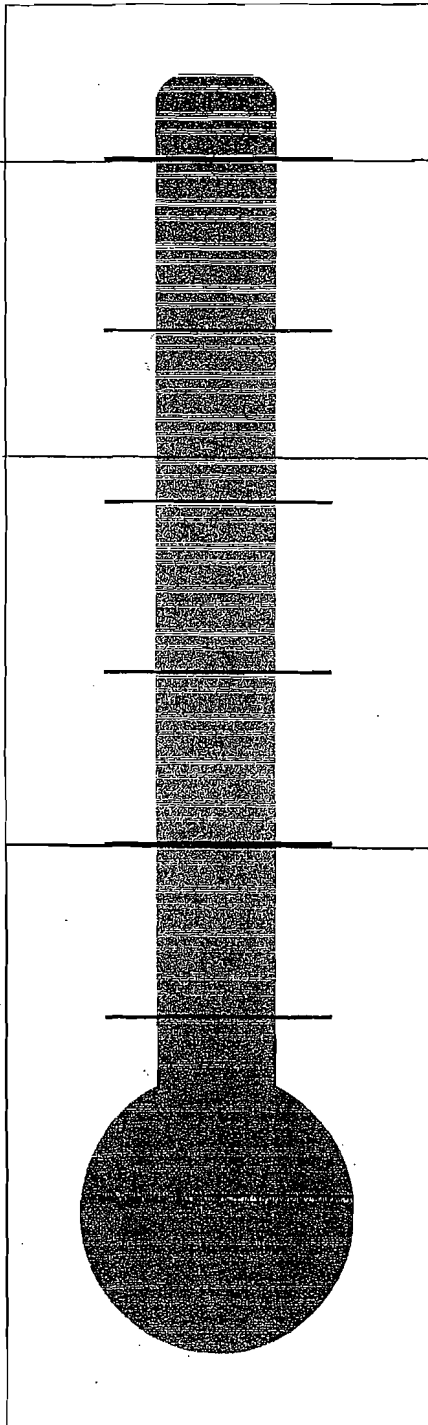
- A. Tap the top of head
- B. Tap the back of the head
- C. Tap the back of the neck (gently contouring)
- D Tap progressively down the sides of the trunk
- E. Tap progressively down the sides of the legs

VII. Press self: Head to feet

- A. Press the top of head
- B. Press the back of the head
- C. Press the back of the neck (gently contouring)
- D. Press progressively down both sides of the trunk
- E. Press progressively down both sides of the legs

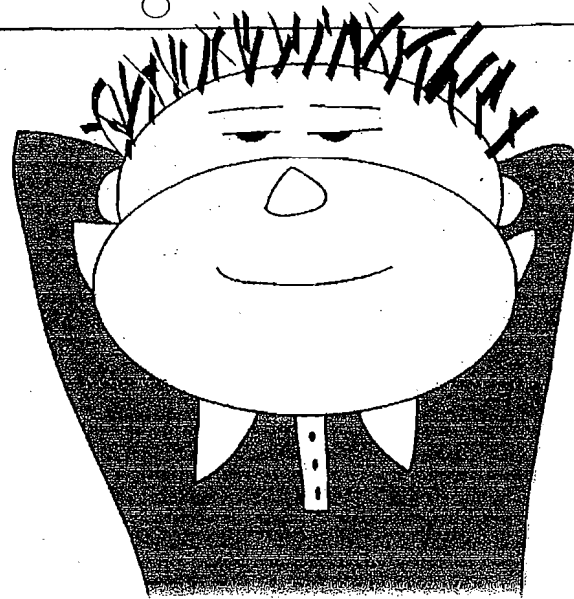
References: www.qsti.org www6.miami.edu/touch-research

Relaxation Thermometer



Mad

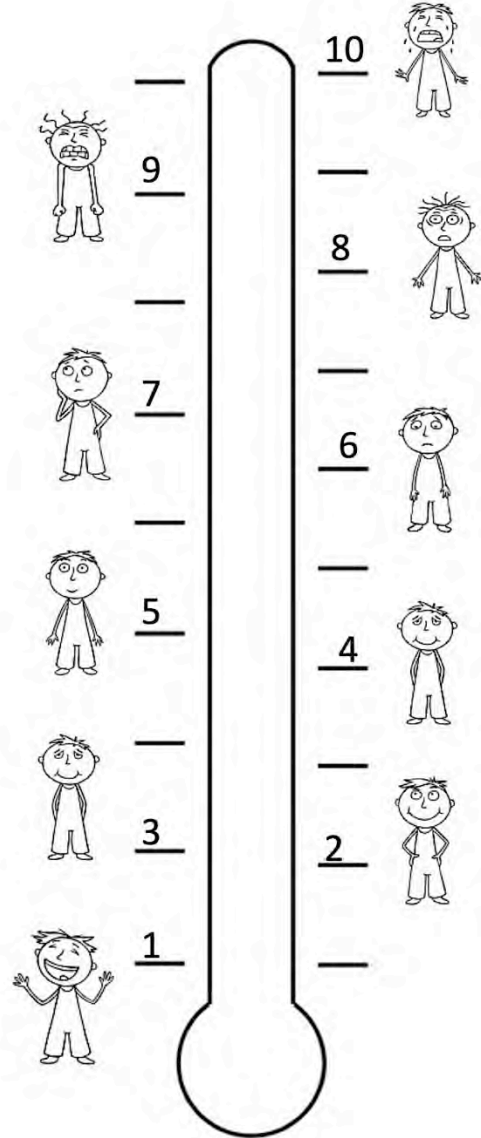
Take 3
deep breaths
1...2...3



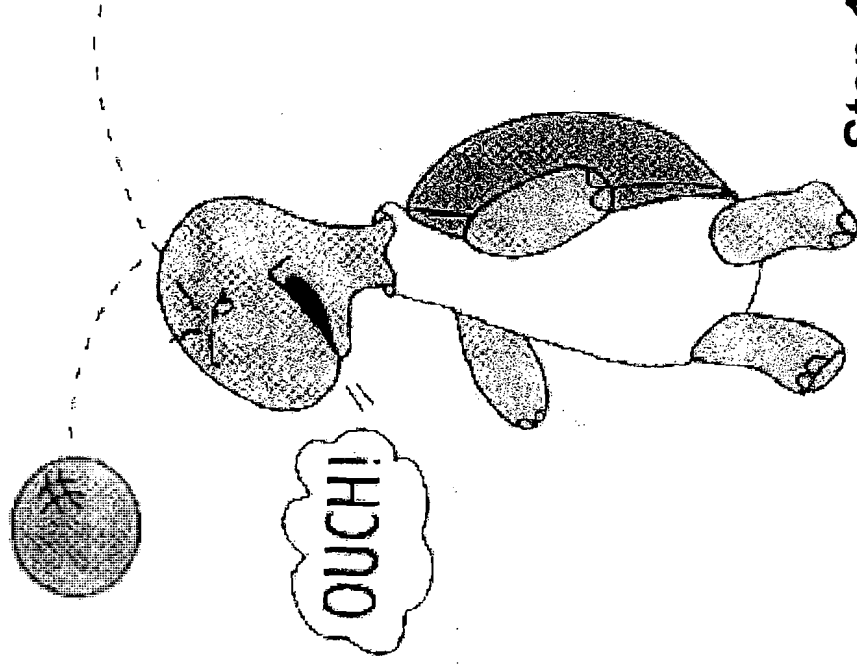
Relaxed

How Are You Feeling Today?

Colors, Scents, Feelings, Behavior Red, Yellow, Green Blue

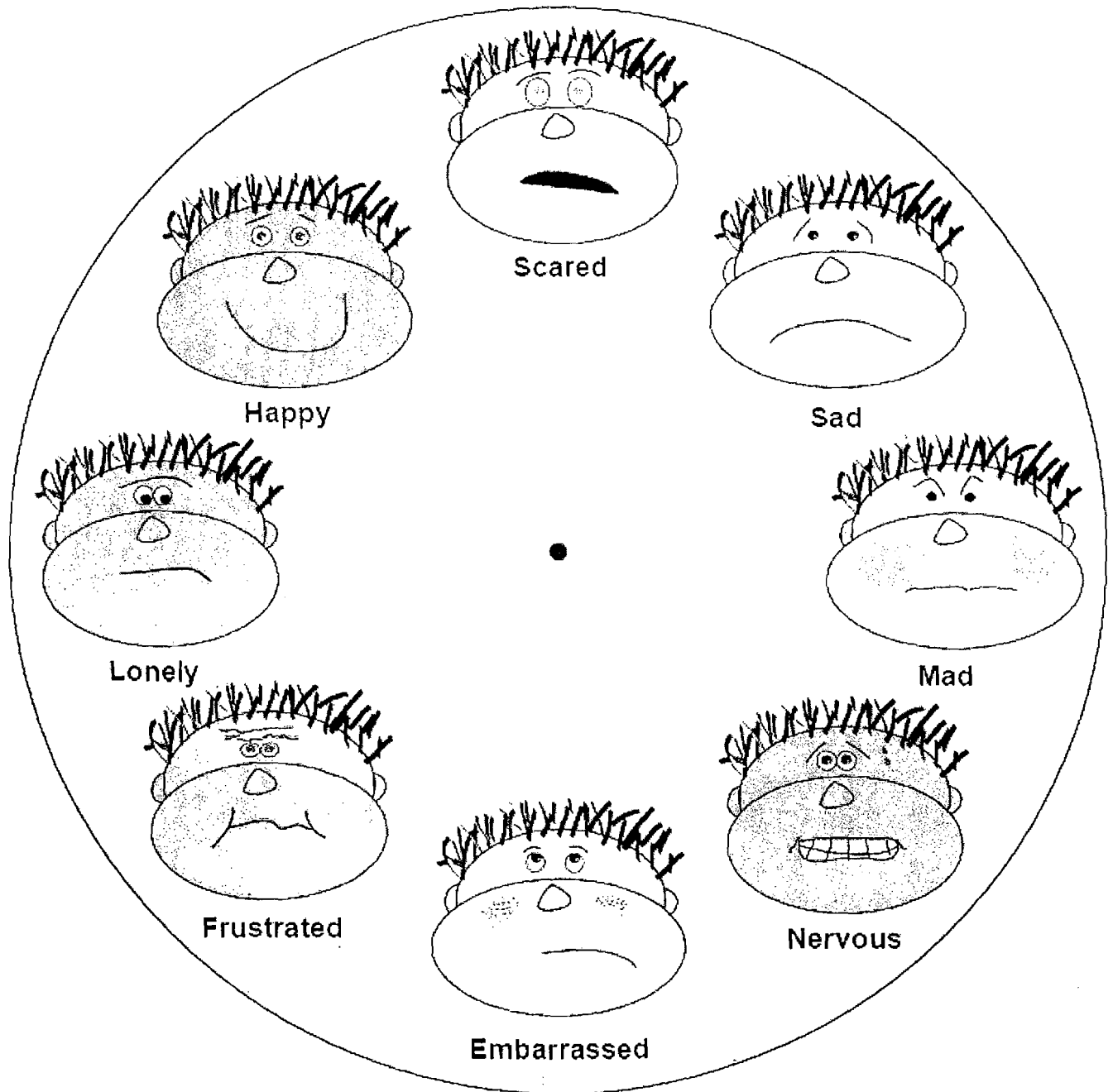


How Did Tucker Get Hit ?



Step 1

Feeling Wheel



NOTES

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SEMINAR AGENDA

Powerful Early Intervention Strategies to Succeed with Young Children with Developmental Problems and Challenging Behaviors (Preschool – Kindergarten)

Instructor: Dr. John Pagano

Course Code: XQP

SCHEDULE

8:30 a.m.	Seminar begins
11:45 a.m. - 1:00 p.m.	Lunch Break
3:15 p.m.	Seminar Concludes

TOPICS TO BE COVERED

- Achieve Success with Your Most Challenging Students
- Learn Strategies to Increase Positive Behavior and Social Skills
- Engage Young Children with Special Needs in Active Learning
- Help Your Students Develop Self-Control
- Use the Best Instructional Strategies for Each Child
- Increase Participation in Learning Activities
- Provide the Best Start for Learning
- Teach Drawing and Printing to Children Who Can't Sit Still
- Gain Meaningful Support from Parents
- Ideas, Ideas and More Ideas!

BER SEMINAR EVALUATION

Powerful Early Intervention Strategies to Help Young Children with Developmental Problems and Challenging Behaviors (Preschool – Kindergarten)

Presented by Dr. **John Pagano**

Please rate the seminar by circling the appropriate numbers below:

	<i>1(low)</i>					<i>7(high)</i>	
<i>Content of the seminar</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<i>Contribution of the instructor</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<i>Meeting facility</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<i>The seminar as a whole</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>

Comments:

Your Name

Position

School

City

State/Province

*May we use your name and position along
with this statement in future brochures?*

Yes _____ No _____

Please do not write on this side

**The reverse side has a program evaluation
which should be pulled out and turned in
at the end of the seminar.**