


The SPM & The SPM-P Quick Tips
Rehab Dynamics
 May 10, 2014



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1

3 New Tools Coming Soon 😊




Tools for Infants (Book)
Sensory Strength & Play (DVD)
SPM for Infants & Toddlers (Assess)

2

Downloadable Lyrics on CD

- Sing and dance (preparing for sitting)
 *For *busy bees* 📢
- My heels down flat
 *For *tippy toe tots* 📢
- Get your wee in the water
 *For *potty pleasers* 📢



3

Today

- ❖ Using the SPM and SPM-P
- ❖ *SPM Quick Tips User Guide*: clinical reasoning
- ❖ Electronic scoring and sorting
- ❖ SPM Quick Tips
- ❖ Case studies: Test-retest and using the QTs
 - ❖ Postural control (Vestibular bilateral integration)
 - ❖ Praxis (motor planning and ideation)
- ❖ The term “therapy practitioner,” used throughout, refers to OT, PT, or SLP

References are at the back of your handouts

4

The Sensory Processing Measures

See your additional handouts

SPM (5-12 yrs)

SPM-Preschool (2-5yrs)

Additional School Environments:
Music, Art, PE, Playground, Cafeteria and Bus

After completed, you add the raw scores on Main Classroom scoring worksheet for each scale & write total in boxes

Total Sensory Systems Scale Score: TOT includes five listed systems, plus items (#41-45) for taste (gustatory) / smell (olfactory) processing:

- TOT is a summary score representing total dysfunction across all sensory systems.
- Useful if you need a single score that represents general dysfunction in sensory processing.
- Used to compare the child's functioning in home and school environments.

Main Classroom Form Profile Sheet

Heather Miller-Rohrbeck, M.S., OTR/L, FAOTA
Diana A. Henry, M.S., OTR/L, FAOTA
and Tara L. Gannon, Ed.D., OTR/L, FAOTA

W (or TDF): QT Age: 5-5 Grade: KC Gender: M
(this form completed: 1-10-11 School: HT Teacher: S.R.)

Scale	T	SOC	VIS	HEA	TOU	BOO	BAL	PLA	TOT	T
80		39-40	26-28	24-28	25-32	25-28	34-36	40	130-168	80
79		38	25	23-24	23-24	23-24	33	39	119-129	79
78		36	24	22-23	21-22	21-22	31-32	38	111-118	78
77		37	22-23	21	20	22	30	37	115-116	77
76		36	20-21	19-20	20	20	28-29	36	109-114	76
75		35	19	18	19	19	27	35	108	75
74		35	18	17	18	18	26	34-35	99-107	74
73		34	18	17	17	20	25	32-33	95-98	73
72		33	17	16	17	19	24	30-31	91-95	72
71		32	16	16	16	19	23	29	86-90	71
70		32	16	16	16	19	23	28	87	70
69		31	15	15	15	18	21	27	84-86	69
68		30	15	14	15	17	20	26	80-83	68
67		29	15	14	14	16	20	25	80-81	67
66		28	14	13	14	15	19	25	75-79	66
65		28	13	13	13	14	18	24	74-77	65
64		27	13	12	12	13	18	24	71-73	64
63		26	12	12	12	13	17	23	69-70	63
62		25	12	11	11	12	16	22	67-68	62
61		24	11	11	11	12	15	21	64-66	61
60		23	11	11	11	12	15	20	62-63	60
59		22	11	10	11	11	14	18	60-61	59
58		21	10	10	10	10	13	16	59-59	58
57		21	10	9	10	10	13	16	56-57	57
56		20	9	9	9	9	12	14	55	56
55		20	9	9	9	9	12	14	53-54	55
54		19	9	9	9	9	12	14	52	54
53		18	9	8	9	9	12	13	51	53
52		17	8	8	8	8	11	13	50	52
51		17	8	8	8	8	11	13	49	51

Circle raw scores on the front (Main Classroom Form)

Example: 3 interpretive shaded areas on both Home and Main Classroom Profile Sheets

Home **Main Classroom** 10

At bottom of HOME Form Profile Sheet subtract Main Classroom TOT T-score from Home TOT T-score

%ile	7	10-11	11	10	11	9	56-58	41	18
Raw Score	14	14	8	15	14	12	11	71	7
T-Score	47	57	43	57	57	47	48	56	7
Interpretive Range	Typical (407-597) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>								
Some Problems (607-697)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
Definite Dysfunction (707-807)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								

DIF Calculation:
 Home Form TOT T-score = 56
 Main Classroom Form TOT T-score = 72
 Environment Difference (DIF) = -16

DIF Interpretation:
 DIF ≥ 15 DEFINITE difference: More problems in Home than in Main Classroom
 14 ≥ DIF ≥ 10 PROBABLE difference: More problems in Home than in Main Classroom
 9 ≥ DIF ≥ -9 NO difference in amount of problems between Main Classroom and Home
 -10 ≥ DIF ≥ -14 PROBABLE difference: More problems in Main Classroom than in Home
 -15 ≥ DIF DEFINITE difference: More problems in Main Classroom than in Home

In this profile, the score of -16 means that there is a definite difference: More problems in Main Classroom than in Home 11

Write raw school environments scores on bottom of Main Classroom Profile Sheet

%ile	7	10-11	11	10	9	56-58	41	18
Raw Score	23	19	17	14	21	24	20	94
T-Score	60	65	71	67	75	72	61	72

cores from SPM School Environments Form:
 ART 33, MUS 33, PHY 28, REC 34, CAF 24, BUS 27
 Cutoff value: 30

Does Not Rise BUS

If score is higher or equal to cutoff scores on SPM School environments = worse than 90 % of typical students 12

School environments

Art Class
 Cutoff score = 29. Elements that may cause problems for children with sensory processing disorders include sitting on stools, smells and touch sensations from art materials (glue, paint, etc.), visual overload from artwork on walls, participating with others in creative projects, manipulating tools (scissors, paintbrushes, etc.), and drawing and other visual-spatial tasks.

Music Class
 Cutoff score = 29. Elements that may cause problems for children with sensory processing disorders include sitting on the floor, sitting on chairs without tables, paying attention to music instructor, listening to music, singing, playing musical instruments, and participating in movement activities (e.g., dancing).

Page 32 in Manual 13


Physical Education Form
This information is in the Manual

↙

Physical Education Class
Cutoff score = 28. Elements that may cause problems for children with sensory processing disorders include large open spaces (indoors and outdoors), paying attention to physical education instructor, learning new athletic skills, need for physical endurance, playing games on a team, and wearing gym clothes.

Example of PE Item:
 Has difficulty completing tasks from a presented model.

Praxis (Planning and Ideas)/Motor planning

Since 1988

 14

Sensory integration vulnerabilities

Item level interpretation -
Examining individual items provides descriptive clinical information on processing vulnerabilities within each sensory system

- Seems to have constant desire to have strong sensory input.
- It is important to look at why this may be occurring. Challenges with over and under responsivity, modulation, praxis and processing problems, as well as individual temperament can all contribute to this behavior.

Under-responsivity
 Over-responsivity
Sensory seeking
and also
 Perception
 Ocular control
 Postural control

15

Physical Education Class (PE)		
1	Resolves peer conflicts without teacher intervention.	Social participation
2	Handles frustration without outbursts or aggressive behavior.	Social participation
3	Has friends and chooses to be with them when possible.	Social participation
4	Does not keep up with peers in physical activities.	Balance and motion/Postural control
5	Does not perform tasks in proper sequence.	Planning and ideas/Motor planning
6	Has difficulty completing tasks from a presented model.	Planning and ideas/Motor planning
7	Throws ball too hard or too softly for distance of target.	Body awareness/Perception
8	Acts fearfully about climbing; may refuse to climb.	Balance and motion/Over-responsive
9	Loses balance when running or playing with peers.	Balance and motion/Postural control
10	Seeks out heights; climbs excessively.	Balance and motion/Seeking
11	Jumps excessively; seeks out "crash landings" from heights.	Body awareness/Seeking
12	Does not notice nearby motion of others (might collide with others).	Body awareness/Perception
13	Plays by self away from others.	Touch/Over-responsiveness
14	Acts impulsively and without caution while playing on playground equipment.	Body awareness/Perception
15	Shows poor timing of motion (misses ball when kicking or swinging bat, brings hands together too slowly or too quickly to catch ball).	Body awareness/Perception

See your PE handout



Sensory vulnerabilities for each PE item

In the Manual pg 31 *continued on next page*

Pg 22 in Manual	Touch (TOU)	Sensory Vulnerabilities for each Home Touch item
30	Pull away from being touched lightly?	Over-responsive
31	Seem to lack normal awareness of being touched?	Under-responsive
32	Become distressed by the feel of new clothes?	Over-responsive
33	Prefer to touch rather than to be touched?	Over-responsive
34	Become distressed by having his or her fingernails or toenails cut?	Over-responsive
35	Seem bothered when someone touches his or her face?	Over-responsive
36	Avoid touching or playing with finger paint, paste, sand, clay, mud, glue, or other messy things?	Over-responsive
37	Have an unusually high tolerance for pain?	Under-responsive
38	Dislike teeth brushing, more than most kids his or her age?	Over-responsive
39	Seem to enjoy sensations that should be painful, such as crashing onto the floor or hitting his or her own body?	Seeking
40	Have trouble finding things in a pocket, bag, or backpack using touch only (without looking)? Does not include 'dislike tags in shirt'	Perception

17

**Clip from *Teen's Sensory Tools*
DVD**

Grace speaks about her sensory vulnerabilities

18

Several vestibular vulnerabilities are included in the SPMs

- Excessive seeking of intense vestibular input
- Vestibular over-responsivity / under-responsivity
- Problems with perception of body movements in space and/or poor postural control

SPM Main Classroom		Balance and Motion (BAL)
44	Runs hand along wall when walking.	Seeking
45	Wraps legs around chair legs.	Postural control
46	Rocks in chair while seated at desk or table.	Seeking
47	Fidgets when seated at desk or table.	Seeking
48	Falls out of chair when seated at desk or table.	Postural control
49	Leans on walls, furniture, or other people for support when standing.	Postural control
50	When seated on floor, cannot sit up without support.	Postural control
51	Slumps, leans on desk, or holds head up in hands while seated at desk.	Postural control
52	Has poor coordination; appears clumsy.	Postural control

19


Ocular - motor control

- The ability to move the eyes in a smooth, functional manner, such as when tracking an object or quickly shifting gaze from one object to another.
- This capacity is integrated with the visual and vestibular systems.
- Item Example: Have difficulty controlling eye movements when following objects like a ball with his/her eyes.

20

Postural control

- The ability to integrate multisensory information particularly from the vestibular and proprioceptive in order to control body movement and position.



- For example: A child who is unable to sit up straight in a chair, or who needs to lean his head on one hand when writing, may be demonstrating poor postural control.

21

SPMs Support *Best Practice* 2014

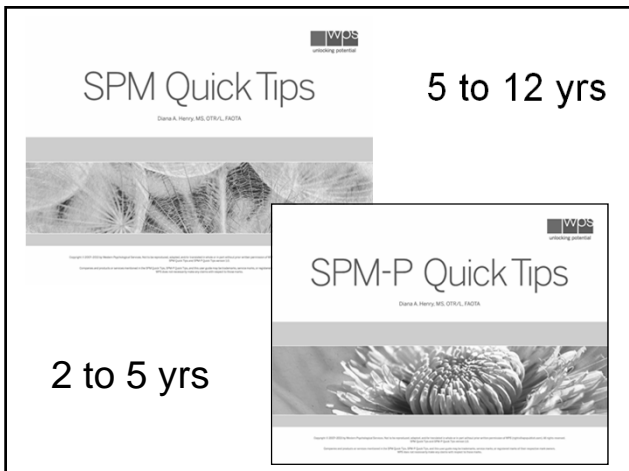
- Examine contextual factors – can compare home & school/day care functioning
- Promote a problem solving approach
- Provide data on which to base decisions
- Promote collaboration between educational staff, home, and outside clinicians

22

Difference between SPM and Sensory Profile

- Compare home and main classroom
- Several environments: art, music, PE, recess, etc.
- Gives info on each sensory system
- Includes praxis (motor planning & ideation)
- Includes scale for social participation
- Easy and fast scoring
- Used as a test re-test to measure progress
- Strong psychometrics

23



Occupational Therapy Practice Guidelines for Children and Adolescents With Challenges in Sensory Processing and Sensory Integration

AOTA, 2011

Occupational Therapy Practice Guidelines for Children and Adolescents with Challenges in Sensory Processing and Sensory Integration (AOTA, 2011)

Sensory-based strategies

ASI® (OT/SI)




25

<p>Sensory Integration ○ ASI® (OT/SI) Siglobalnetwork.org</p> <p>Requires special training to provide OT using an ASI® sensory integration approach</p> <p>Involves individualized intervention</p> <p>Using sensation in an intentional manner</p> <p>To support a child's ability to succeed in daily life activities</p>	<p>sensory-based strategies “OT using sensory-based interventions”</p> <p>Often an integral part of early intervention, school-based practice, and community-based programs</p> <p>Emphasize collaborative team empowerment</p> <p>May be used in conjunction with ASI®</p>
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26


Sensory-based strategies

- Reflect on the possibilities created when we are open to collaboration with other practitioners (PT, SLP, psych etc.)
- As well as facilitating collaborative team empowerment with family members & all school staff, (classroom, PE, music, art, cafeteria, recess, bus)
- ‘Upping the ante’ with everyone participating! Jane Case-Smith stated: the elements to effective intervention include: “...Intensity, contexts and family supports...” (AOTA Autism Conf Dec 2011) 27

Sensory Diet to Sensory Buffet

SPM Quick Tips strategies may include items for a sensory diet, term coined by Patricia Wilbarger, OT.


More inclusive terms such as Sensory lifestyle or sensory buffet, are used to emphasize diversity in the many possible sensorimotor activities that can be offered to the child (similar to the many food choices available at a buffet).



28

Strategy first used by the preschooler, so the teacher made it part of the day

Seeking proprioception while lining up, by pushing against the door frame




29

“Sensory challenges may also impact the child’s thought processes and choices when dealing with frustrations” (Orloff, 2012)

Why need to include Social Participation

Case study - John Quick Tips draft - January 2013 - do not duplicate

	Environment	Add'l Raters	SPM #	SPM items	Sensory Vulnerabilities	Tips
Social Participation	Art		2	Resolves peer conflicts without teacher intervention.		 <ul style="list-style-type: none"> Cue the child to use perspective taking, using specifics of the situation, by using the Superflex curriculum with cartoon characters (Social Thinking). Use a <u>visual tracking system</u> of self initiation tied with reward.

Lane, S. J., & Lynn, J. Z. (2011). *Sensory Integration Research: A look at past, present, and future*

Sensory Integration Special Interest Section Quarterly, 34(3), 1-4.

Intervention research
Examine effectiveness of therapeutic techniques with ASI™

Outcomes Focused Research
Clear identification of intervention outcomes

These charges can an also be applied to sensory-based strategies

31

Spiral Foundation Research Forum



March 24, 2013 (left to right)

- ❖ Diana Henry
- ❖ Diane Parham
- ❖ Ayelet Ben Sasson
- ❖ Tina Champagne
- ❖ Brian Mullen
- ❖ David Lewkowicz
- ❖ Teresa May-Benson
- ❖ Karen Adolph
- ❖ Simone Gill
- ❖ Ellen Cohn
- ❖ Rosanne Schaaf
- ❖ Janice Burke (moderator)

32

How do school based therapists choose what strategies to use?

Collins, A., & Dworkin, R. J. (2011)
Pilot study of the effectiveness of weighted vests

Conclusion:

- Results indicated that weighted vests were **not** effective in increasing time on task.
- The lack of an established treatment protocol strengthens the need to use intervention with systematic data collection.

Need: “data driven intervention” (Schaff)

33

**Mulligan and Trolley-Hanson
(AOTA, 2012)***

- Naturalistic interventions in context of daily living at school, home and in the community
- Change from us being the expert, to team members being the experts in their environments
- Important to include data to see if what we are doing is working

*Early Intervention for Young Children with ASD

Contents	
Acknowledgments	iv
Foreword	vi
SPM Quick Tips User Guide	
Introduction	1
What the SPM Quick Tips Is	1
What the SPM Quick Tips Is Not	2
Goals of the SPM Quick Tips	2
Who Can Use the SPM Quick Tips?	3
SPM and SPM-P Assessment Raters	3
SPM Quick Tips Users	3
Using the SPM Quick Tips:	
From Initial Test to Retest	4
Additional Assessment and Intervention	7
Components of a Comprehensive Evaluation	7
Referral to Other Health Care Professionals	7
Intervention in Other Contexts or Environments	7
Additional Options for Intervention	7
SPM Quick Tips Strategies	8
Guided by Clinical Reasoning	9
Types of Clinical Reasoning	9
Considering the "Big Picture"	9
Interpretation	10
Choosing Strategies That Meet Objectives	10
Recording Data	10
Guidelines for Using the SPM Quick Tips Record Form	11
The SPM Quick Tips Team	11
Team Meetings	12
Unifying Principles	12
Preparing for the Initial Team Meeting	12
Conducting the Meeting	12
Initial Team Meeting Follow-Up	13
Retest	13
Retest Team Meeting	13

TABLE OF CONTENTS (cont)

CASE EXAMPLES

Case A: Child has difficulty tolerating clothes Modulation

Case B: Child was removed from a Montessori school because of being too "aggressive" Perceptual

Case C: Kindergarten child is reprimanded for not sitting cross-legged when on the rug Postural

Case D: Preschool child diagnosed with autism is unable to dress himself Praxis

**5 "PROCEDURES" TO CONSIDER
WHEN SUGGESTING SPM Quick Tips**

Each Quick Tip focuses on either:

- 1) Addressing the underlying deficits
- 2) Providing family/staff/peer training to increase awareness, change attitude and interaction skills, provide support and share resources
- 3) Teaching self advocacy
- 4) Adapting task / materials / equipment / environment
- 5) Using cognitive and/or behavioral strategies to teach social skills and support social participation

Case A: Amelia (modulation disorder)

Presenting problems
Third-grade child has difficulty tolerating clothes, refuses to participate in "messy" activities, and does not participate with others.

SPM results
Definite Dysfunction in Touch
Some Problems in Social Participation

Contributing SPM items
Touch
Home item 32: *Become distressed by the feel of new clothes?*
Home item 30: *Pull away from being touched lightly?*
Art item 6: *Shows distress when hands or face are dirty (with glue, finger paints, food, dirt, etc.).*
Bus item 4, Main Classroom item 28, Recess item 4: *Is distressed by accidental touch of peers (may lash out or withdraw).*
PE item 13: *Plays by self away from others.*

Hypothesis: Difficulty modulating sensory input specifically noted in overresponsivity, resulting in fight-flight responses to unexpected touch as well as other touch input.

Suggested approaches (from SPM Quick Tips)
1. Address the underlying deficit. Offer specific and graded sensations to increase the child's organization and optimal level of arousal, adjusting the intensity, duration, quality, and predictability of the sensory experience in either a facilitatory or inhibitory manner according to the child's needs and response (Wattling, Koeps, Davies, & Schaeff, 2011).

- Offer a handheld shower, brushes, sponges, loofas, and exfoliates at bath time.
- Offer tight-fitting clothes such as leotards, stockings, swimsuits, Under Armour, SPIO compression garments, Body Sox, and so on.
- Before the child dresses, and throughout the day, provide opportunities for him to receive maintained-touch pressure by doing the following:
 - Offering hugs.
 - Playing the "pizza game," in which a ball is rolled over the child's back using maintained-touch pressure. Using your hands or a large therapy ball, put pretend "cheese" and "pepperoni" on top and ask him what else he would like on the "pizza." Then put him in the "oven" by placing a large beanbag chair on top of him. Do not cover his head.
 - Playing the "hot dog game" by wrapping the child in a large terrycloth bath towel and pretending it is the "bun" and he is the "hot dog." While he is lying on his back, apply slow, maintained-touch pressure with your hands over each body part, from shoulders to feet, to give him pretend "ketchup," "mustard," and whatever else he requests. (*Tools for Students*)
- Offer preferred textures during daily routines to help "normalize" touch and calm the child.
- Provide opportunities for total-body, maintained-touch input in obstacle courses (e.g., going through a tight cloth tunnel, rolling on the mat, doing a military crawl on the belly, crawling under a limbo pole).
- Add heavy muscle-work activities including jumping, lifting, climbing, pushing, and pulling.

39

2. Provide family/staff/peer training to increase awareness, change attitude and interaction skills, provide support, and share resources.

- To facilitate understanding and support, teach all staff why the child can find accidental touch to be physically uncomfortable or even painful, and how to deal with this avoidance, which is not meant in a personal way, but is an automatic reactive and protective response. (*Tools for Teachers, Teen Sensory Tools*)
- Teach all the children to stay an arm's length apart when standing in line. Videotape them following this rule and use this as a teaching tool.
- Avoid touching the child lightly, from behind, or without warning, as doing so can cause a "fight, freeze, flight, or fright" response. Realize that the child may experience the touch as painful.
- Explain to the other children that accidental touch is painful to the child, why this is so, and how to avoid causing it.

3. Teach self-advocacy as soon as it is appropriate to do so.

- "Students hold their arms straight out at their sides, hands bent up (as in saying STOP with a hand signal). Have students spin around, keeping their arms out. Their 'spinning space' is an appropriate space when conversing with people. Students love this game because the spinning action really does help them remember the space boundary." ("You're in My Bubble! Space Boundaries for Children with Autism")
- Encourage the child to teach others about personal "space bubbles" and the importance of not invading someone else's bubble.

4. Adapt the task, materials, equipment, and/or environment.

- Separate space areas to prevent incidental touching by others (e.g., in crowded hallways).
- Designate spaces for circle time (e.g., carpet square, beanbag chair). Give the child more space during floor work or group work (e.g., allow him to sit farther back from the circle or group).
- Place the child at the front or back of the line to avoid touching by others.
- Give the child a heavy book to hold or a pressure vest to wear while standing in line.
- Encourage group, team, or partner games in which the activity's physical demands help the child both regulate and interact at the same time.
- When appropriate, provide enough space around the child to prevent incidental touching by others.
- When possible, use maintained-touch pressure instead of light touch (e.g., when complimenting the child, push down on his shoulders instead of touching him lightly on the shoulder).

5. Use cognitive and/or behavioral strategies to teach social skills and support social participation.

- Remind the child of ways to communicate instead of pushing back, such as saying "Don't push me" or "I need more space." This allows him to use language instead of physical force to have his needs met. (He may not know the words to use when he is feeling this way.)
- Read the Sensory Story "Outdoor Recess" to develop an effective routine such as the following: "Going to recess is better when I get my body ready. When I'm waiting in line to go to recess, I give myself big hugs and push really hard against the wall with my arms." (*Sensory Stories*)

40

What the SPM Quick Tips Is

- A navigation tool to help answer the question "What is next?" following the use of the SPM
- A framework based on careful standardized assessment and developed from observations across multiple environments of the child's sensory processing challenges
- A doorway into clinical reasoning for presenting possibilities to the team
- A process intended to help team members collaborate and develop the skills that will make them the "experts" in supporting the child (capacity building)

41

The SPM Quick Tips Is (cont)

- A springboard for guiding the team in brainstorming, idea generation, and problem solving
- A tool to support practitioners in using clinical reasoning and consultation skills in the intervention process
- A convenient color-coded navigation tool targeting a child's sensory processing in multiple environments
- A data recording system to measure the effectiveness of progress monitoring
- A means of measuring qualitative progress through staff responses and quantitative progress through use of the SPM or SPM-P

42

SPM Quick Tips is NOT

- Prescriptive
- A watered down version of OT/SI (ASI™)
- A cookbook of activities based on problematic behavior and diagnosis
- A pre-designed plan to provide to teachers and parents
- A replacement for referrals for additional services
- A replacement for additional services

Sample Evaluation Reports 24
 Following administration of the SPM 24
 Following administration of the SPM-P 27

SPM Quick Tips 28
 Home form 28
 Main Classroom form 56
 Art Class form 81
 Music Class form 89
 Physical Education Class form 93
 Recess/Playground form 99
 Cafeteria form 104
 School Bus form 109

Appendix: Sensory Safeguards and Guidelines
 for Using Sensory-Based Strategies 113

Products and Other Resources Mentioned
 in the SPM Quick Tips 114

References 129

*"The invariable mark of wisdom
 is to see the miraculous in the common."*
 Ralph Waldo Emerson

Development of
 SPM Quick Tips

While working on the 'The SASI' (pre SPM)
School Assessment of Sensory Integration

Collaborated with Danette Rowley, OT in Canada

Early Quick Tips in 2004

Please DO NOT REPRODUCE this document (Diana Henry September 2004)
 This document is copyrighted and is only a sample of possible "Quick Tips" which will be developed for the SASI.
Sensory Processing - Meeting Your Students' Needs in the Classroom

Our senses provide us with feedback and information about the environment and about ourselves. Seven sensory systems (tactile, vestibular, proprioception, vision, auditory, taste and smell) integrate information that allows us to effectively perform work, play and self-care activities. Our success in coping with a barrage of sensations (i.e. sight, sound, texture) affects our sense of well-being. The central nervous system (CNS) helps us deal with excitement, attend to tasks, and cope with distractions. Students who have difficulty processing sensory information can be identified by observing their behavior in the classroom. For example, a student who is hyper-sensitive to touch and sound may find the close quarters of a gym, assembly or standing in line difficult. Sensitivity within the sensory system(s) often presents in a student as difficulties in learning and may unfairly label the student as "difficult" or "timid". The following chart identifies signs of an under- or over reactive sensory system.

Sensory System	Possible Signs of Under Responsiveness	Tips to Turn it on!	Possible Signs of Over Responsiveness	Tips to Turn it off!
TACTILE (Touch) Provides information about touch, pressure, texture, temperature and pain	<ul style="list-style-type: none"> • Mouths objects • Always touching things • Unaware of temperature changes • High pain tolerance • Unaware of dirty face, messy nose • Unaware of bumping into objects/people 	<ul style="list-style-type: none"> • Use highly tactile materials (bin of beans/rice, sand letters, tactile puzzles) • Provide a fidget toy to rub in hand during circle (beach/gel ball, Therapy, manipulatives) • Provide a tactile object to carry when walking in line to gym, library, music • Place a strip of Velcro underneath desk surface for the student to rub during desk work 	<ul style="list-style-type: none"> • Doesn't like getting dirty, touching glue or paint • Only uses fingertips to grasp and manipulate objects • Sticky about clothing (long sleeves, high neck) • Dislikes getting teeth brushed, face washed, haircuts • Difficulty standing in line • Overreacts if bumped or touched unexpectedly • Prefers BIG hug vs. kiss (light touch) • Restless, trouble sitting still 	<ul style="list-style-type: none"> • Place student in front/back of line to w/ touch by others • Apply deep massage to palms before crafts • Allow student to wear gloves or use tools to minimize level of messiness and amount of touch (i.e. cut play dough) • Let student direct adult hand prior to using their own hands (student's hand overtop yours in finger point) • Give student a "heavy" book to hold while standing in a line

When SASI became SPM in 2007

Obtained permission from WPS, the publisher of the SPMs, to be able to relate the Quick Tips to actual SPM items

Held focus groups at workshops worldwide during optional 'Lunch with Diana' to obtain ideas/feedback regarding Quick Tips

47

A few in the HUGE global village!

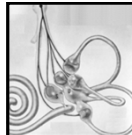
Katie Allgood, Kathy Barrett, Colleen Basaraba, Rena Baxter, Danielle Bell, Cheryl Domino, Dave Herzberg, Debbie Hinerfeld, Jennifer Brady- Johnson, Sarah Johnson, Heather Miller-Kuhaneck, Cristy Mendoza, Victoria Nackle, Amy Niezrecki, Carol Olson and her graduate students, Diane Parham, Thomas Passerino, Eric Polz, Jocelyn Reynolds, Pat Rose, Rick Ruess, Kathy Sanders' team, Deanna Sava, Jim Spear, Sue Swindeman, Monique Taylor, Kris Tuma, Renee Watling, Deb Wilson, Maureen Kane-Wineland, Janet Wright, workshop attendees throughout North America, England, Scotland, N. Ireland, Ireland, Australia...and many more!

49

Case studies using SPM QTs

- * 2006 (Opatia) Dx: ED: social participation...praxis
- * 2007 (Dustin) Dx: ADHD... Also sensory issues?
- * 2008 (CCNS) Dx: Autism...severe (self contained)
- * 2009 (A) Dx: Autism...preschooler...praxis
- * 2010 (FM-Declan): Expelled from Montessori
- * 2011 (QT) Kg: Vestibular-postural- bilateral
- * 2012 (Mason) Dx: Severe LD...Praxis
- * 2012 (National and international case studies)
- * 2013 (Bismarck ND preschool study): Prevention
- * 2013 (John): Behavior prob... OR to sound/touch
- * Summer 2013 (John): ASI (OT/SI)

50



KG CASE STUDY
Jan 14 through April-1-11

- Unable to sit cross legged & is reprimanded (All classrooms)
- Not able to stick to steady beat (Music)
- Collides into others (PE)



Vestibular bilateral integration: Postural Disorder

51

Rocks in his chair



Wraps his feet around the chair legs



52

Side sits in his classroom, resting on the back of his hand



53

When tries to sit cross legged

Has to hold his feet to stay sitting up



Supports himself with his arms under his chin



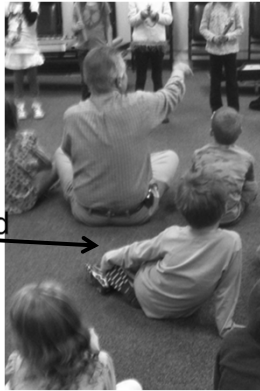
54

Or, has to hold his legs



55

Side sits in music



Reprimanded →

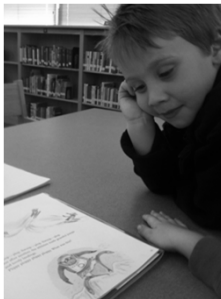
56

In library, he is also in trouble...
outside of rug boundaries,
leaning on his hands



57

Though engaged, leans head on hand



He told me his legs were tired
and he wanted to sit down

58

He leaned against the ruler and said,
"This holds me up"



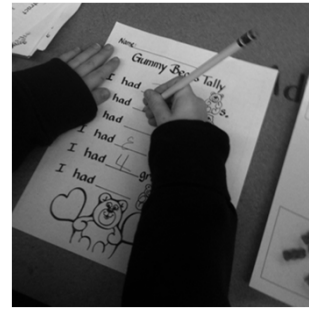
59

He turns his paper instead of making postural adjustments



60

His tone impacts his grip
He uses wrist and arm movements



61

Collapses instead of putting arms out for protective extension



62

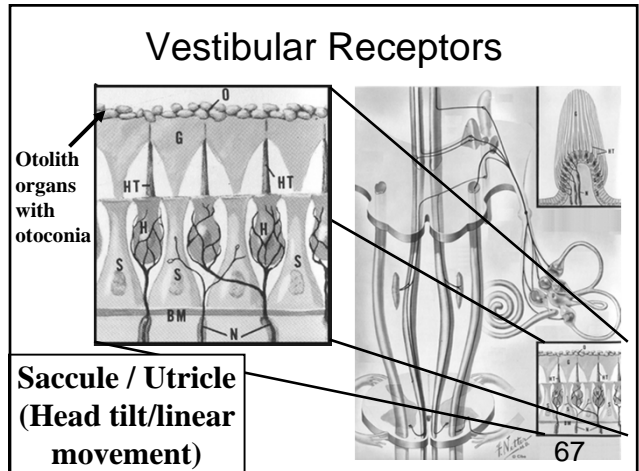
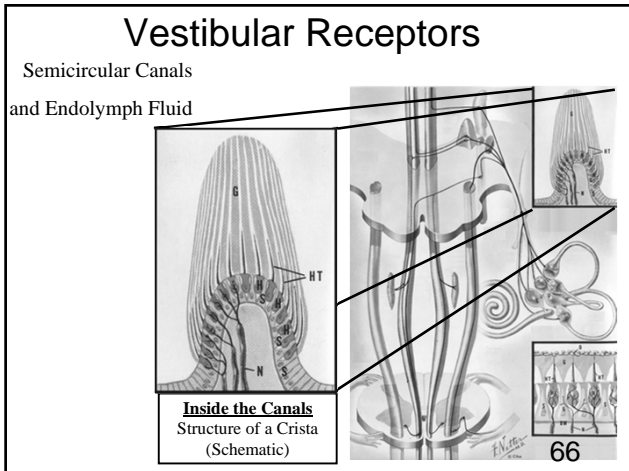
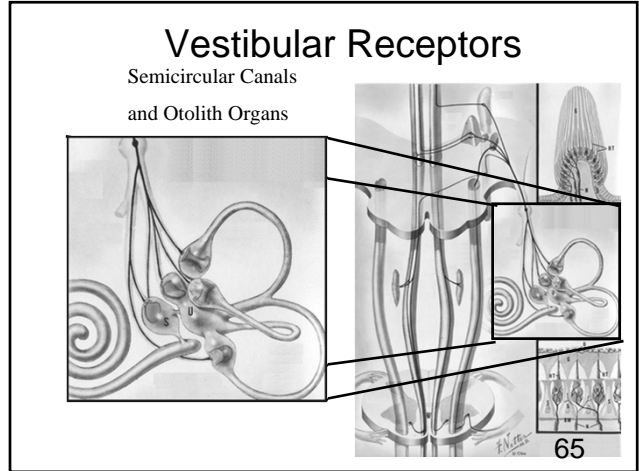
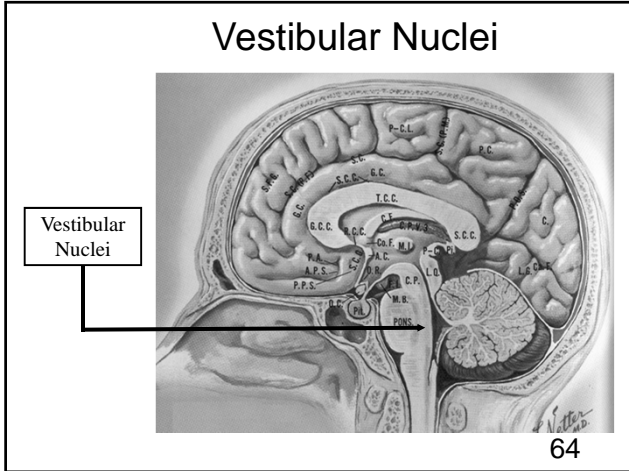
Additional
Clinical
Observations:
Poor stability

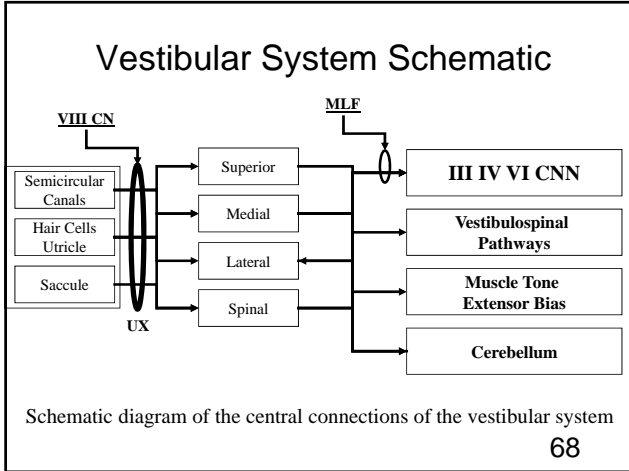


Poor ocular tracking



63





Vestibular Connections to the Eye

Juggling
influenced cortical plasticity: Changes in grey matter induced by training in juggling (Journal of Nature: Issue 325 3-25-04 427:311-312 Draginski, B. et al)

Seeing Clearly
Fix, Focus, and Follow

69

Environment	SPM Item #'s	Vestibular SPM items		Tips
Main Classroom	52	Has poor coordination; appears clumsy.	postural control	Pull, push table; offer a visual/ tactile/ proprioceptive reminder about which hand to use with a band, string, weight; encourage fine motor activities including spreading of cream cheese on bagel in cafeteria and at home.
Home	59 Grandparent	Fall out of a chair when shifting his/her body?	postural control	Use a chair ball ; a peanut ball; a chair with arms; Sit in chair in different positions such as having the back of the chair towards the table; allow child to sit on his knees; provide lots of opportunities for swinging, jumping and pushing; offer various ways to sit when on floor: Long sit , lying on tummy; side sit to each side; do the 'Rocking puppy'. Take to the playground to use climbing walls and swings.
Music	13	Has difficulty moving body to rhythm (clapping hands, tapping feet, etc.).	postural control	Slow down and repeat the movements before using the song; do big movements; provide additional visual, auditory, and or tactile cues of how to follow sequence; Offer a visual/ tactile/ proprioceptive reminder about which hand to use with a band, string, weight; Break down sequence into smaller steps so child does just the hands or just the feet.
Phys Ed	9	Loses balance when running or playing with peers.	postural control	Encourage play in obstacle courses; provide opportunities to walk on uneven surfaces such as floor mats, curbs and rocks; bring the play to the ground such as using scooter boards while on the belly; watch for locking of joints (bone on bone instead of using muscles while weight bearing); provide movement while asking for core stabilization; encourage climbing activities.


70

Student Observation by PT at H.S. Elementary School

QT was observed by the PT during his PE class

73

SPM Team Meeting: 1-4-11
Quick Tips were used to brainstorm ideas




Water helper strategy & teacher has an 'ah ha' moment re touch and effort


74

January 27, 2011 KG teacher wrote:

The students love my spinning center




He carries the water bottle bin to & from recess




75

He turns his chair when he needs to




Permitted to sit alternative ways




"Now, I am not hearing impulsive calling out when sitting on the rug"

76

Climbing ON equipment, instead of just playing chase



Class is doing: The *Rocking Puppy*, *Spider Push Ups* and *Airplane*



Electronic *Quick Tips* will allow recess aide to record # of times uses climbing equipment

77

Tool Chest
For Teachers,
Parents & Students

#3
The Fragile Egg

THE FRAGILE EGG

BENEFITS
This is a fun way to work on the muscles that help you curl up. The rocking movement calms you down.

TO BEGIN

- You will need enough room to allow children to rock back and forth.
- To start the game, check that each of the children have enough space behind them to be safe.
- If the floor is hard, a small pillow or towel should be placed behind the child's lower back.

EGG GAME INSTRUCTIONS

- Begin in a sitting position with knees bent and feet flat on floor.
- Place arms and hands under the knees.
- Keep the chin tucked into the chest and slowly rock back onto the back.
- Keep the chin tucked in as the feet come off the floor in a rocking motion.
- Continue rocking by bringing the body up, still "curled up" until the feet are flat on the floor. Keep going back and forth.

Additional Project
Trace the egg shape on paper. Have the children add the face, arms and legs to the egg shape. You could also have them use colors to show how doing this game made them feel.

Supplies needed:
Paper for egg shape, crayons and markers

Tool Chest
For Teachers,
Parents & Students

#13
The Ball Chair

THE BALL CHAIR

BENEFITS
It can help take the wiggles out and help you sit up straight. It can also strengthen your back. This is called "dynamic sitting".

TO BEGIN

- It is best to have balls with feet. They are easier to carry and they stay in place when the student stands up. Size varies depending on the height of the children. Shorter children will need smaller balls. Generally for preschool use 14"-18", K-1st 18"-22", and 2nd grade and up 22"-26".
- Show children the ball chair and demonstrate how to sit on it properly.
- Give each child a blank sheet with lines and a pencil or marker.
- Have children sit on their papers some safety rules for using the ball chair in their classroom.
- Once you are satisfied that everyone is clear on the ball chair rules, it's time to try it out.

SAFE Ball Chair Safety Rules

OK Bounce a little Sit for 2 to 3 minutes Pass it quietly to your neighbor Put it up and out of the way when not in use	NOT OK Bounce a lot Kick the ball Poke the ball Throw the ball Disturb others
--	---

THE BALL CHAIR INSTRUCTIONS

- Look at the ball chair illustration.
- Notice: It is important to keep a 90° angle at the ankles and slightly above a 90° angle at the knees to create a "slight anterior pelvic tilt".
- The feet are flat on the floor or supported.
- The desk/tabletop is no higher or lower than about 1" above the bent elbows.
- Stand up slowly keeping your hands on the ball so the feet stay on the floor.

Supplies needed:
Balls with feet, and pumps to inflate and deflate as needed.

Name of Recorder:		SPM Quick Tips Strategies							
		Main Classroom							
Child: QT		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	2 month totals	
Item		1	2	3	4	5	6		
1	Sitting Holding legs/or side sitting	58	77					135	
2	Chair turned around	21	67					88	
3	Water helper	13						13	
4	Model movements	3						3	
5	Dizzy disk	18						18	
6	Army crawl to pick up paper							6	
7	Encourage climbing on playground equip		56					56	
8	Tool Chest activities -Rocking Puppy - Spider Push-Ups - Airplane		18					18	

Was NOT reprimanded 135 times, in 2 months, in the classroom

SPM QT Record Form

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WPS
Autism Solutions

SPM Quick Tips Strategies													SPM Quick Tips Record Form												
Strategies													Frequency												
1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
Totals													1	2	3	4	5	6	7	8	9	10	11	12	13

RECORDING DATA: Why & How

Increasing number of research studies published in the *American Journal of Occupational Therapy* (AJOT) employ quantitative designs and answer basic research questions.

However, a need remains for examining program effectiveness (Brown, 2010 & AOTA School Specialty Conference, July 2013).

Therefore, each SPM Quick Tips team member is provided a Quick Tips Record Form to record each time they implement a strategy.

83

RECORDING DATA: Who

All who are on the child's team can participate in implementing sensory-based strategies.

Home: parents, other family members, caregivers, baby sitters and all therapists (OT, PT, SLP).

School: main classroom teacher, sped teachers, psychologist, school counselor, social worker, art, music, PE teacher, library staff, paraprofessionals (in classroom, cafeteria, on playground, bus) & day care

84

Guidelines for using the QT Record Form

- Use alarm system on phone, tablet, computer, etc. as a reminder
- Group similar QTs to be completed daily with convenience & ease
- Have the QT Record Form visible (place on fridge vs. putting in a drawer)
- As QTs are digitally tallied, place a # in box to indicate the # of times the QT has been used. Don't use an x.
- Put the QT Record Form in the same location every time
- Complete the QT Record Form at the same time each day/multiple times throughout the day (e.g., breakfast, after school, supper, bedtime)
- If you are having difficulty recording the Quick Tips, please let your therapist know you need assistance.

86

March 8, 2011

his PE teacher wrote:



- We had scooter relay races on their belly
- We ran through 3 part obstacle courses
- We begin class with supermans and yoga poses to hold (tree, mountain)
- We used balloons to hit in the air, to the wall and back and forth with each other

He is more focused and is not bumping into other students or walls as he had

87