"Putting It All Together": Individualized Programming for Children with Autism

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Beyond Boundaries of Autism

BBA Information:

- In-home therapy program
- Non-profit agency
- Program of Goodwill NCW
- Serving 23 counties

BBA Beliefs:

- All individuals with autism can learn and develop skills
- Functional communication is vital
- Careful evaluation of sensory needs & function should occur when there are challenges
- Community participation is essential in learning and quality of life.
- Treatment will be supportive, meaningful, based on abilities and interests , and meeting the unique needs of the individual

Main Points:

- Everyone agrees early intervention is important
- As unique as the kids are, different treatments will benefit them differently because of ASD being such a heterogeneous population
- Differing perspectives on methodologies
- Intervention must focus on family involvement- “empowering families”

Just as 1 puzzle piece

does not fit every puzzle…

1 approach does not fit every child!

So…

Where do we start?

Assessment:

- Parent/Caregiver Interviews
- ABLLS
- Asperger's Observation Checklist
- Social Skills Menu
- Adult-Child Relationship Map (ARM) Child Development Guide
- Greenspan Functional Development Scale
- Motivation Assessment Scale
- Relationship Development Questionnaire
- Behavioral Assessment
- Oral Motor Profile
- Foundational Skills Inventory
- Therapeutic listening Evaluation
- Infant-Adult Sensory Checklist
- Sensory Profile
- Vision Motor
- Ziggurat Classic & High Functioning Checklists
- Ziggurat Individual Strengths & Skills Inventory

Framework for program development

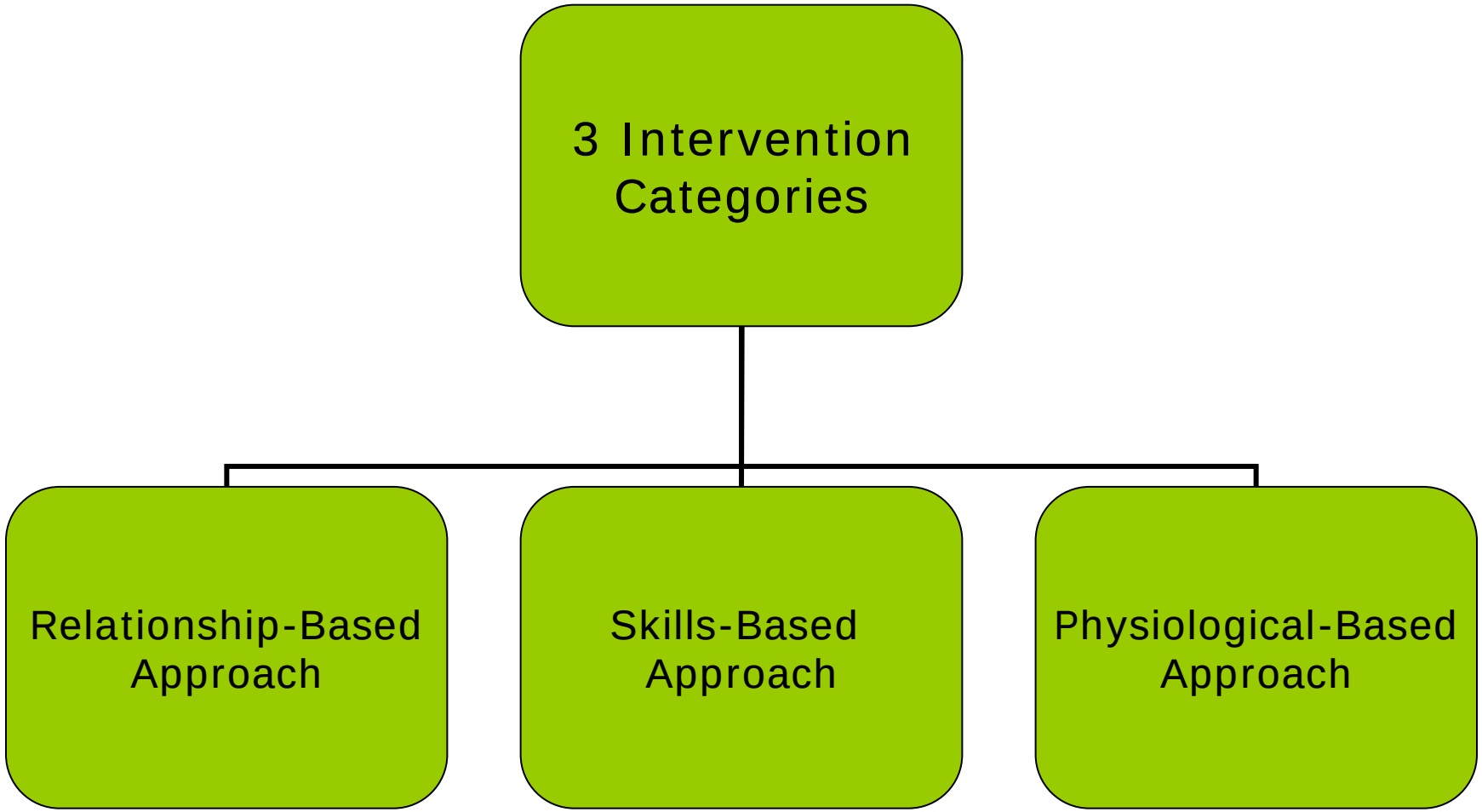
Ziggurat Worksheet

Ruth Aspy, Ph. D., and Barry G. Grossman, Ph. D.

Client:_____ **Date:**_____

Behavior/Areas of Concern		**Interventions**	**Check All That Apply:**		
			A	**B**	**C**
Sensory/Biological Needs	Intervention:				
	Underlying Characteristics Addressed:				
Reinforcement	Intervention:				
	Underlying Characteristics Addressed:				
Structure & Visual Supports	Intervention:				
	Underlying Characteristics Addressed:				
Task Demands	Intervention:				
	Underlying Characteristics Addressed:				
Skills to Teach	Intervention:				
	Underlying Characteristics Addressed:				

Treatment Types



Relationship Based Approaches

- Views core deficit as “absence of relatedness- failure to develop attachment with other people”.

- Characterized by:
  - unconditional acceptance
  - almost constant contact
  - following child’s lead

Floortime - Developmental, Individual-Difference, Relationship Based (DIR)

- Developed by child psychiatrist Stanley Greenspan
- Meet the child at his current developmental level and build on the child's particular strengths
- Goal in Floortime is to move the child through the six basic developmental milestones
- Six rungs on the developmental ladder:
  - self regulation and interest in the world
  - intimacy/shared attention
  - two-way communication
  - complex communication
  - emotional ideas/shared meaning & symbolic play
  - emotional thinking
- Join in CZ activity & move the child toward more increasingly complex interactions, a process known as “opening and closing circles of communication”

Anticipation

Continuation of interaction

P.L.A.Y. Project- (Play & Language for Autistic Youth)

- Developed by Dr. Solomon
- Based on DIR
- Child centered, but not passive-

  "Meet 'em where they're at & take 'em where they need to go"

- Begin in CZ & expand:
  - Begin with sensory motor play
  - Turn play into a game
  - Add salient language
  - Introduce imagination
  - Establish simple relationship (FDL 1-4)
  - Leads to complex relationship (5&6)
  - Recently added level 7- thinking about thinking/feeling about feeling

Shared engagement- Peek a Boo

RDI- (Relationship Development Intervention)

- Developed by psychologist Dr. Gutstein

- **6 aspects:**
  - Emotional Referencing
  - Social Coordination
  - Declarative Language
  - Flexible thinking
  - Relational Information Processing
  - Foresight and Hindsight

- **Building on episodic memory**
  - event in our life anchored by emotional experience

- Spotlighting & Labeling

- **Developmental levels:**

1. Novice
2. Apprentice
3. Challenger
4. Voyager
5. Explorer
6. Partner

Play To Talk

- Developed by: Dr. James MacDonald & Dr. Pam Stoika
- Belief that language delays are a social interactive problem & communication development happens in emotionally attached partnerships
- Adult must join in world of child & match their skills
- Responsive strategies:
  - Balance
  - Match
  - Respond
  - Share control
  - Play & affirm


Social

Skills Based Approaches

- Believes deficits can be minimized through explicit instruction.
- Employ principles of Applied Behavior Analysis (ABA)
- Characterized by:
  - Assessing skill deficits
  - Systematically teaching skills
  - Collecting data

Verbal Behavior Training- (VBT)

- Based on theories developed by Skinner & principles of ABA
- The primary verbal operants: echoics, mands, tacts, and intraverbals
- Use sign language/PECS/vocals
- Teaching should occur in NET (language based environment)
- One of the key elements of a VB program is the mixing and varying instructional demands, rather than mass trialing them.

It is said that VB attempts to capture a *child's motivation* to develop a connection between the value of a word and the word itself. Many therapists are now using techniques of VB to bridge some of the gaps seen in ABA.

Manding for motivating activity


social
Communication

Physiological Based Approaches

- Promotes improvement of sensory and neurological functioning.
- Some examples: dietary supplements, dietary restrictions, sensory integration, auditory therapy, vision therapy, cranial-sacral therapy, music therapy, hippotherapy.
- Characteristics:
  - Assessment by a specialist
  - Development of a treatment plan

Sensory Integration Therapy- (SI)

- Developed by Dr. Jean Ayers
- SI is the process through which the brain organizes & interprets external stimuli such as movement, touch, smell, sight and sound.
- Goal: to facilitate the development of the nervous system's ability to process sensory input in a more typical way which helps:
  - calm the nervous system
  - desensitize over responsiveness
  - increase the ability to perform new movement patterns
  - reduce sensory defensive behaviors
- A specific program will be planned to provide sensory stimulation to the child, often in conjunction with purposeful muscle activities
- Additional SI Techniques utilized by BBA:
  - Brushing
  - Therapeutic listening
  - Vision integration
  - Oral motor

Sensory Menu

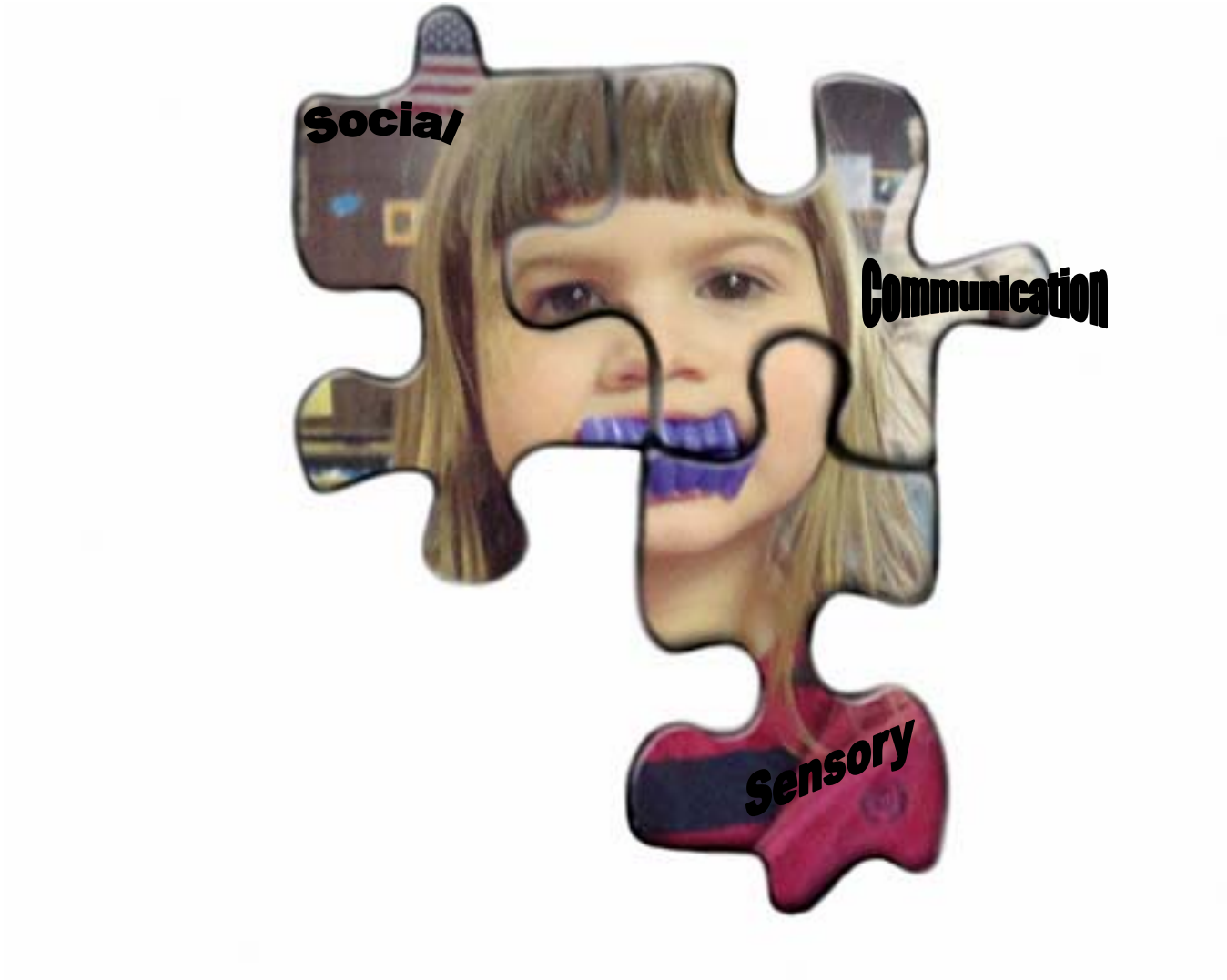
Sensory Diet Isaac E.

Provide sensory activities to help his arousal level equal the needs of the targeted task.

Transition ACTIVITIES: When he needs to change from one level of arousal activity to a different level: De-escalate High to Low-(Calming) If going from a highly active task to a quieter task try the following:	**Transition ACTIVITIES: When he needs to change from one level of arousal activity to a different level: Low to High-(Alerting)** If going from a low active task to a one of more movement etc. Try the following:	**CALMING (dim lights, quiet music) To help him *maintain* a state of quiet do the following:**	**Movement/ Vestibular**	**Touch/ Tactile**	**Proprioception**	**Vision**
Bring volume level down	Engaging his Core	Use short, clear phrases	Exercise ball	Brushing	Joint compressions	Target activities
Rolling him into a burrito w/ Pressure	Tickling	Keep volume level low	Swinging	Sensory Tub's (rice, beans, noodles, amshed potatoes)	Deep pressure	Tracking (bubbles)
Push heavy laundry basket/ Heavy work	Increasing your volume/energy	Massage hands/feet	Jump-o-line	Fidgets	Core work (see additional form)	Golf tees in foam
Wheelbarrow walking	Have him eat crunchy foods	Small space (fort/under blanket/tube)	Midline exercises (see additional forms)	Theraputty/Play doh	Heavy work	Vision motor exercises (see additional form)
Roll large ball over body			Stairs	Lotion	Wrapped tightly in blanket	
Roll him back & forth on ball			Spinning	Bubble wrap	Jumppoline/ jumping/ trampoline	
Swinging in blanket			Hold him out like an airplane	Gak	"squishes"	
Lift/Push 2 liter bottles with foam animals or colored water			Running	Moon sand	Ankle or wrist weights	
Swing in chair swing or net swing			Upside down "tick tock"	Shaving cream	Trampoline	
Rub his feet, face			Fingerplays w/ movement	Water play	Weighted backpack/ weighted vest	
Give him his NUK					Bottles w/ water in them	
Change your surroundings					Moving heavy laundry baskets	
					Chewy food/ chew tube	

1. Be aware of actions of those around him and how it's affecting his level of arousal. Put in place sensory actions that would help modify levels.
2. Select activities to match need for modification, or sensory integration activities throughout the session.

Sneaking in oral motor


Social
Communication
Sensory

Challenging Behaviors

- All behavior has a function! "Your explanation guides your intervention…"
- They would if they could, but something is getting in their way, and that something is a deficit skill due to a neurological glitch.
- Not a motivation issue!
- Compliance is a thinking/cognitive skill not a behavioral skill.
- Time outs do not work-may reduce one type of behavior, but may reappear as another.

Challenging behaviors continued…

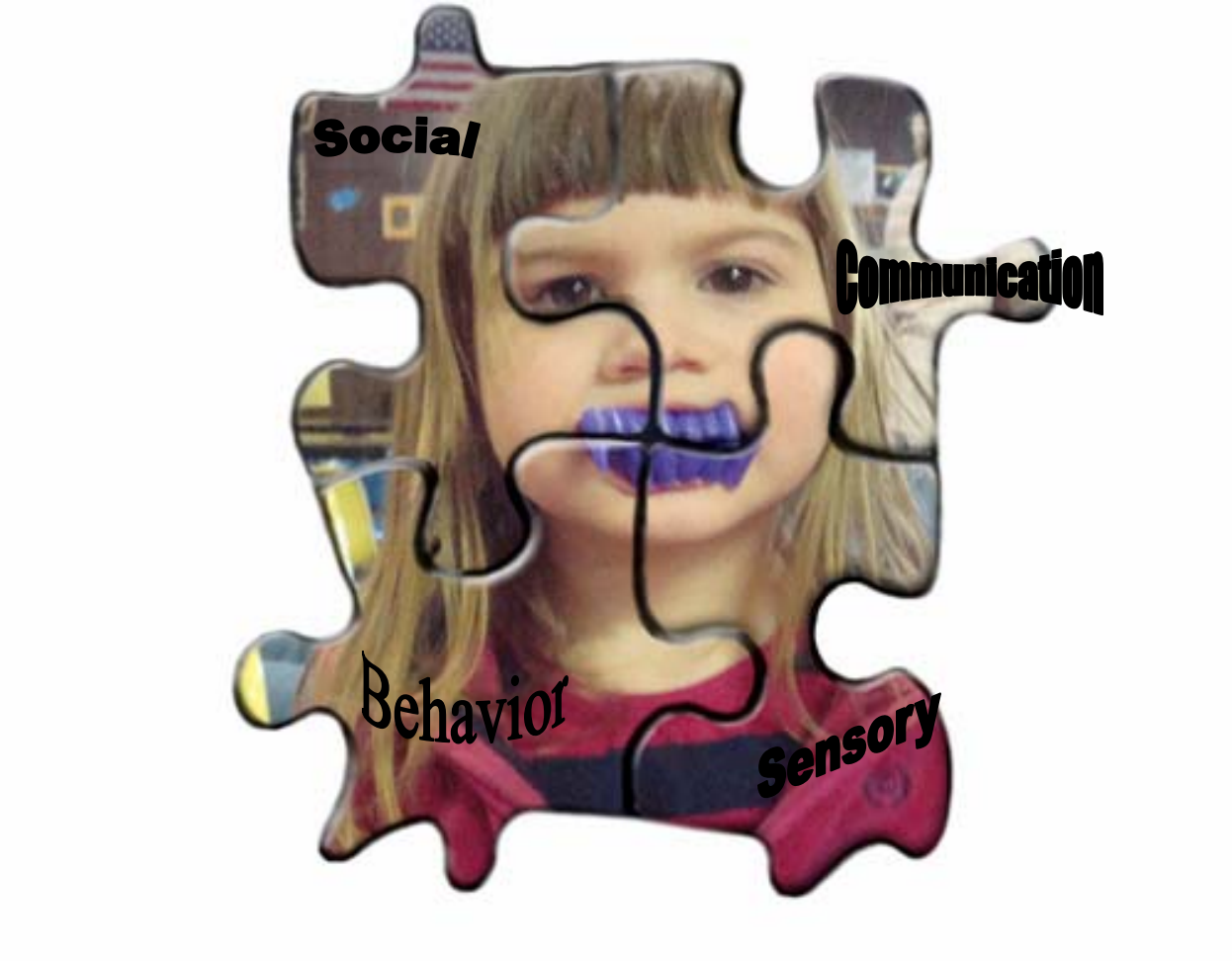
- Must develop positive behavior support plan based on function
  - How can environment be changed?
  - Be pro-active! Know your kiddo!
  - Teach coping skills
  - Programs such as “How Does Your Engine Run” or “Way to A”.

Escalation Hierarchy

- **Adaptive Stage- Goal is to evaluate, refine, organize, & teach skills.**
- Signals:
- Relaxed posture
- Smiling
- Even Breathing
- Engages in activities w/ therapist/ transitions easily
- Uses verbal communication to express wants/ needs
- Makes spontaneous eye contact
- Affectionate
- Will wait for desired item/ activity
- Asks for sensory appropriately (squishes/tickles) by affection
- Likes conversation about high interest topics such as:
- Support:
- Uses visual support/ foreshadowing for scheduled activities or changes
- Reinforce positive behavior w/ enthusiasm
- Practice self regulation techniques/ review "Engine" social stories
- Give "free time" for her to complete "routines"
- Respect her "regulating" her world (i.e. things having to be put in place, etc...)
- Allow her to access sensory items/ activities (likes deep pressure/ "squishes")
- Repeat her when attempting to engage "movie lines"
- Keep volume of voice moderate
- When talking about high interest topics use short/simple phrases and questions

- **Tension Stage-Goals is to diffuse stress & return to equilibrium.**
- Signals:
- Lessened eye contact
- Decreased ability to complete activity
- Decreased ability to wait- wanting to rush through the activity/day
- Movements seem hurried, sometimes hands shake
- Increase in repetitive questioning
- Increased need to have environment predictable
- Increased volume in voice/ Voice tension
- Muscles tense up
- Anxiety/anxious increased
- Supports:
- Give A or B choices
- Increase visual supports & foreshadowing
- Acknowledge that you understand her (if you do)/ Validate feelings
- State expectations clearly
- Know when to stop talking
- Pointing to choices from "engine" social story
- (not open ended) for A or B choices for motivating activity
- Avoid:
- Too much auditory input
- Ignoring requests
- Trying to "joke" w/ her
- If/Then statements
- Negative phrases ("Don't touch that" or "No")
- Auditory – avoid loud volume of voices

The Whole Picture



Research

- **<u>Research Supporting Play-based Interventions</u>**
- **Emerging research strongly suggests that child centered, relationship based intervention is very effective in helping young children with autistic spectrum disorders gain language and social skills.**
- Tsakiris, E. (2000). Evaluating Effective Interventions for Children with Autism & Related Disorders: Widening the View and Changing Perspectives. Interdisciplinary Council on Developmental and Learning Disorders Clinical Practice Guidelines Workgroup.
- Greenspan, S.I., and Wieder, S. (1997) Developmental Patterns and Outcomes in Infants and Children with Disorders in Relating and Communication: A Chart Review of 200 Cases of Children with Autistic Spectrum Disorders. *The Journal of Developmental and Learning Disorder*, 1, (1) 87-141.
- Jocelyn LJ, et al. (1998) Treatment of Children with Autism: A Randomized Controlled Trial to Evaluate a Caregiver-Based Intervention Program in Community Day-Care Centers. *Developmental and Behavioral Pediatrics,* 19 (5), 326-334.
- Mahoney G, Perales, F. (2005) Relationship-Focused Early Intervention with Children with Pervasive Developmental Disorders and Other Disabilities: A Comparative Study, *JDBP,* 26 (2).
- Ozonoff S, Cathcart K.(1998) Effectiveness of a Home Program Intervention for Young Children with Autism. *Journal of Autism and Development Disorders,* 28, 25-32.
- Sheinkopf SJ and Siegel B. (1998) Home-Based Behavioral Treatment of Young Children with Autism. *Journal of Autism and Developmental Disorders,* 28(1), 15-23.
- Solomon R, et al. (2007) Pilot study of a parent training program for young children with autism: The PLAY Project Home Consultation model. *Autism: The International Journal of Research and Practice,* 11 (3), 205-224.

Research continued:

- **Research supporting VBT:**
  - Carbone, V.J., Morgenstern, B., Zecchin-Tirri, G. & Kolberg, L. (2006). The Role of the Reflexive Conditioned Motivating Operation (CMO-R) During Discrete Trial Instruction of Children with Autism. *Journal of Early and Intensive Behavior Intervention, 4 (4).*

- **Research Supporting Oral Motor:**
  - Bathel, J.A. (2006). Current research in the field of oral-motor, muscle based therapies: Response to logic, theory, and evidence against the use of non-speech oral motor exercises to change speech sound productions by Gregory Lof.
  - Sara R. Johnson & Associates are currently engaged in multiple research projects studying the effects of oral motor.

- **Research Supporting Therapeutic Listening:**
  - Hall, L. &_Case-Smith, J. (2007). The effect of sound based intervention on children with sensory processing disorders and visual-motor delays. *American Journal of Occupational Therapy.* 61 (2), 209-215.

Resources

- www.floortime.org
- www.talktools.net
- www.vitallinks.net

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- **Ayers, J.** (1979). *Sensory Integration and the Child.* Los Angeles, CA: Western Psychological Services.
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- **Kranowitz, C. S.** (1998). *The Out-of-Sync Child: Recognizing and Coping with Sensory Integration Dysfunction.* New York, NY: The Berkley Publishing Group
- **Kranowitz, Carol Stock.** (2006 2nd edition). Out of Sync Child Has Fun: Activities for Kids with Sensory Processing Disorder. Pedigree.
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- **Nurek, K. & Wendelberg, D.** (1996). *Vision Development: 0-3 An Observe & Play Workbook.* Elkhart Lake, WI: Achievers Unlimited Inc.