Your QUICK SCAN Instruction Manual

Your four-part QUICK SCAN instruction manual is designed to help you better understand and remember your child's developmental profile. Staying true to the idea of different learning styles and the importance of multimodal instruction, the Quick Scan is represented in four different ways:

- Part A: *The QUICK SCAN Explained*
- Part B: *Know Your Boat*
- Part C: *Know Your Song*
- Part D: *Know Your Map*

I recommend that you start with one child. However, you can also use the QUICK SCAN on yourself, other children and other adults. I assume that most of you will just take a curious glance at the four parts of this Instruction Manual. But I hope that many of you find something on this menu of approaches that's meaningful and fun. Whatever works for you!

So here's the QUICK SCAN followed by each of the four Parts of Your Instruction Manual.

THE QUICK SCAN

Child's name: _____ Age: _____

Rater's name: _____Date: _____

Please circle the most appropriate number.

Behavioral Style / Temperament

Motor Activity level:

3	2	1	0	1	2	3
High activity			Average			Low activity

Impulsivity

3	2	1	0	1	2	3
Acts before thinking			Average			Thinks before acting

Attention Span

3	2	1	0	1	2	3
Short			Average			Long

Initial Reaction

3	2	1	0	1	2	3
Slow to Warm-up			Average			Quick to Warm-up

Adaptability

3	2	1	0	1	2	3
Very inflexible			Average			Very flexible

Intensity of Reaction

3	2	1	0	1	2	3
Dramatic			Average			Reserved

Usual Mood

3	2	1	0	1	2	3
Unpleasant, serious, tense			Neutral			Pleasant, joyful, relaxed

Regularity/Predictability

3	2	1	0	1	2	3
Low regularity, unpredictable			Average			High regularity, predictable

Sensory Profile

Hearing Speech

3 2 1 0 1 2 3

Tunes-in people talking — Average — Tunes-out people talking

Hearing Noise

3 2 1 0 1 2 3

Oversensitive — *Sounds & noises* — Undersensitive

Vision

3 2 1 0 1 2 3

Quick to notice — *Visual stimuli* — Slow to notice

Taste

3 2 1 0 1 2 3

Oversensitive — *Changes in foods, hidden tastes* — Undersensitive

Smell

3 2 1 0 1 2 3

Oversensitive — *Odors* — Undersensitive

Light Touch

3 2 1 0 1 2 3

Oversensitive — *Sensitive to light touch, tickling, clothing texture* — Undersensitive

Deep Touch

3 2 1 0 1 2 3

Avoids, dislikes — *Physically close contact* — Seeks, likes

Movement/Body Position in Space

3 2 1 0 1 2 3

Avoids — *Moving, spinning through space (swing, seesaw, rides, heights)* — Likes

Internal Body Awareness/Physical Symptoms

3 2 1 0 1 2 3

Over-reports — *Symptoms of illness, not feeling well* — Under-reports

Skills Profile

Fine Motor

3 2 1 0 1 2 3

Difficulty, avoids — *Manipulating small objects* — Ease, enjoys

Handwriting

3 2 1 0 1 2 3

Difficulty, avoids — *Writing with crayons, pencils, markers* — Ease, enjoys

Gross Motor

3 2 1 0 1 2 3

Difficulty, avoids — *Running, jumping, climbing, playing sports/athletics, dancing* — Ease, enjoys

Speaking

3 2 1 0 1 2 3

Difficulty — *Putting thoughts into words* — Ease

Listening

3 2 1 0 1 2 3

Difficulty — *Understanding spoken communication* — Ease

Writing

3 2 1 0 1 2 3

Difficulty — *Putting thoughts onto paper* — Ease

Reading

3 2 1 0 1 2 3

Delayed — *Reading skills* — Advanced

Understanding Spatial Relations

3 2 1 0 1 2 3

Poor — *Understanding puzzles, shapes, block design, maps* — Excellent

Visual Arts

3 2 1 0 1 2 3

Poor — *Drawing, crafts, painting* — Excellent

Music

3 2 1 0 1 2 3

Poor — *Musical ability* — Excellent

Math

3 2 1 0 1 2 3

Delayed — *Math ability* — Advanced

Time Awareness

3	2	1	0	1	2	3
Difficulty, inaccuracy			*Estimating, pacing*			Ease, accuracy

Planning, Organization, and Implementation

3	2	1	0	1	2	3
Difficulty			*Planning ahead / strategizing / sequencing / preparing*			Ease

Social Skills

3	2	1	0	1	2	3
With difficulty, rejected			*Makes friends*			Easily, popular

Problems with physical health

3	2	1	0	1	2	3
Severe			*average*			None

Other Family, Environmental, or Life Stresses

3	2	1	0	1	2	3
Severe			*average*			None

Other Family, Environmental, or Life Stresses (experienced by child)

Circle best answer according to current impact:
0= no problem; 1=little; 2=medium; 3=big problem

FAMILY STRESSES

0	*1*	*2*	*3*	Death of parent
0	*1*	*2*	*3*	Death of other family member
0	*1*	*2*	*3*	Death of pet
0	*1*	*2*	*3*	Substance abusing parent(s)
0	*1*	*2*	*3*	Physical or sexual abuse of family member
0	*1*	*2*	*3*	Mental or behavioral disorder of parent or sibling
0	*1*	*2*	*3*	Disability of parent or sibling
0	*1*	*2*	*3*	Physical illness of parent or sibling
0	*1*	*2*	*3*	Addition of a sibling
0	*1*	*2*	*3*	Physical separation from primary caregiver
0	*1*	*2*	*3*	Change in primary caregiver
0	*1*	*2*	*3*	Primary caregiver does not speak language of community
0	*1*	*2*	*3*	Marital discord
0	*1*	*2*	*3*	Separation/ divorce
0	*1*	*2*	*3*	Parent dating
0	*1*	*2*	*3*	Re-marriage
0	*1*	*2*	*3*	Blended family
0	*1*	*2*	*3*	Domestic violence
0	*1*	*2*	*3*	Parent or family member with crime problem
0	*1*	*2*	*3*	Parent underemployed
0	*1*	*2*	*3*	Parent working long hours outside the home
0	*1*	*2*	*3*	Lack of support from extended family

CHILD'S PERSONAL STRESSES

0	*1*	*2*	*3*	Physical changes (e.g., weight loss or gain, acne, puberty, etc.)
0	*1*	*2*	*3*	Sexual/ gender identity issues
0	*1*	*2*	*3*	Physical or sexual abuse
0	*1*	*2*	*3*	Neglect
0	*1*	*2*	*3*	Foster care / institutional care
0	*1*	*2*	*3*	Adoption
0	*1*	*2*	*3*	Witness to violence
0	*1*	*2*	*3*	Chronic, long term, or undiagnosed illness
0	*1*	*2*	*3*	Disability (diagnosed or undiagnosed): _____
0	*1*	*2*	*3*	Not enough free time

PEER RELATIONSHIP STRESSES

0	*1*	*2*	*3*	Discord with peers (e.g., bullying, exclusion, etc.)
0	*1*	*2*	*3*	Not enough peers with shared interests
0	*1*	*2*	*3*	Loss of a good friend
0	*1*	*2*	*3*	Friends who are struggling
0	*1*	*2*	*3*	Social media stress

COMMUNITY STRESSES

0	*1*	*2*	*3*	Adjustment to a new and different culture
0	*1*	*2*	*3*	Social discrimination or isolation of family from community
0	*1*	*2*	*3*	Religious or spiritual problem

EDUCATIONAL STRESSES

0	*1*	*2*	*3*	Inadequate school facilities
0	*1*	*2*	*3*	New school and/or new teacher (circle)
0	*1*	*2*	*3*	Unexpected change of teacher or classroom (circle)
0	*1*	*2*	*3*	Does not get along with teacher(s)
0	*1*	*2*	*3*	Does not get along with classmates
0	*1*	*2*	*3*	Poor academic performance
0	*1*	*2*	*3*	Homework problems
0	*1*	*2*	*3*	Undiagnosed/unrecognized/unsupported disability

INADEQUATE RESOURCES

0	*1*	*2*	*3*	Food insecurity/lack of adequate nutrition
0	*1*	*2*	*3*	Homelessness or uncertain housing
0	*1*	*2*	*3*	Financial instability
0	*1*	*2*	*3*	Lack of adequate health care

ENVIRONMENTAL STRESSES

0	*1*	*2*	*3*	Unsafe neighborhood
0	*1*	*2*	*3*	Dealing with relatives
0	*1*	*2*	*3*	Exposure to upsetting news stories
0	*1*	*2*	*3*	Natural disaster

OTHER STRESSES

0	*1*	*2*	*3*	_____
0	*1*	*2*	*3*	_____
0	*1*	*2*	*3*	_____
0	*1*	*2*	*3*	_____

This Instruction Manual is a work in progress. Part A stands on its own and should be of immediate use to the interested reader. It helps explain different facets of the QUICK SCAN. Parts B, C and D are much more experimental and (MUCH!) better understood in the context of my forthcoming book, Different Children, Different Parents, Same Boat. In this book, awaiting publication, parent and child are represented as two birds, Raph and Hawk. The story of their river adventures weaves in and out of the parent-training manual and serves as a metaphor for the parent-child journey. Until publication of the entire book, I offer the boat pictograph (Part B), bird song (Part C) and river map (Part D) here for those who might be curious.

Your Instruction Manual Part A: *The QUICK SCAN Explained*

What it means: Some aspects of the QUICK SCAN might seem complicated and confusing. Here, I will try to explain each facet of the QUICK SCAN profile in clear and simple language. The number system is intended to help parents avoid black-and-white generalizations and see their children more accurately in shades of gray. Parents should give a number rating of 0 or 1 if your child is pretty close to average and this facet of his or her profile is not a big deal. Number ratings of 2 or 3 should be assigned if this facet of the profile might be a more significant factor; possibly are probably contributing to ease or difficulty in certain situations. It is important to remember that your child's profile might change over time. The QUICK SCAN is just a here and now description; designed to be practical.

Goodness of fit: Everybody has differences in behavioral style.[1] Everybody has different strengths and weaknesses.[2] There is no such thing as a "good" or "bad" profile. However, a child's profile can make some situations relatively "easy" and render others more "difficult". As parents describe their child's profile, they should consider "goodness of fit"; that is, how each facet of their child's profile explains why some situations and tasks are naturally easier, while others are more challenging. For each facet of your child's profile, I will discuss situational advantages (*"Good for")* and disadvantages (*"Problem if"*). Also, after QUICK SCANning your child, QUICK SCAN yourself. Looking at one problem situation after another, consider "goodness of parent-child fit" between your profile and your child's profile. For each facet of your child's profile, I will discuss the following:

- *"Good for":* I will give examples of common situations or tasks for which each facet of your child's profile might be protective; that is, a strength or an advantage.
- *"Problem if":* I will also give examples of common situations or tasks for which each facet of your child's profile might be a risk; that is, a weakness or a disadvantage.
- *"Parent-child fit":* Children do not grow up in glass bubbles. Relationships matter. It is important to consider the potential overlap of different child and adult profiles. Throughout this program, you will think about how your own profile fits with your child's. This perspective will explain why some parent-child interactions go more easily than others. We will not be analyzing every important relationship in your child's life. But it is important to note how many different types of relationships lend themselves to this kind of analysis: parent-parent fit, parent-grandparent fit, parent-teacher fit, professional-

[1] See William Carey, Temperament In Clinical Practice.
[2] See Howard Gardner, Multiple Intelligences, Different Kinds of Smart.

patient fit, sibling-child fit, and so. The point is: It's not just about the kids! Adults have their own differences and challenges too. When you start overlapping lots of QUICK SCANs, it gets very interesting but very complicated. We should keep these family and community complexities in mind; especially how the dynamic interplay of individual differences and relationship triangles can change over time. All that being said, here, we will keep things simple and focus primarily on parent-child relationships.

Accommodations: As discussed in the 10th mile, there are two different kinds of strategies: accommodations and interventions. Most children with developmental differences need a combination of both. Accommodations are built upon an acceptance of the child's developmental differences; interventions are about changing the child. Accommodations require some degree of dependence upon adults; interventions are about increasing the child's independence. Accommodations are often used in public; interventions tend to be more private. Accommodations usually involve bypassing difficulties or finding alternative strategies; interventions are about working hard to fix skill deficits. Accommodations are usually based upon empathy and common sense; interventions require expertise and science. In the 10th mile, we reviewed "leaks in the boat" and necessary interventions or "patches" for different facets of your child's profile. Here, we will cover "bailing" strategies; that is, accommodations. Simply understanding the source of your child's behavior should automatically lead to some common sense and relatively simple solutions. In this section, I will provide some practical strategies for accommodating each facet of your child's profile. For example, if your child has high motor activity level, don't make him or her sit forever; allow for regular movement breaks. As we go through the QUICK SCAN, I will focus on accommodations that you can start using on your own right away.

Strengthen Strengths: As emphasized throughout this discussion, it's just as important to nurture talents and interests as it is to accommodate weaknesses. The QUICK SCAN should highlight abilities, not just weaknesses. In the sections covering your child's Skills Profile, I will offer a few comments on how to foster growth in areas of strength.

Side notes: In these side notes, I will offer some additional thoughts on developmental differences. I hope that readers will find these tangential comments interesting and helpful.

Explaining the QUICK SCAN

Behavioral Style/ Temperament

We will begin with eight facets of "temperament" or behavioral style:

- motor activity level
- impulsivity
- attention
- initial reaction
- adaptability
- intensity of reaction
- mood

- regularity

Starting in the 1940s, Drs. Chess and Thomas[3] used similar categories to describe infants and categorize them as "easy", "difficult", and "slow to warm-up". In one of the longest and most fascinating studies ever done,[4] these infants were followed throughout childhood and into adult life. This pioneering work dispelled the old idea that babies are born a blank slate upon which parents write the child's destiny. We now know that everybody is born different. Dr. Barry Brazelton developed the Neonatal Behavioral Assessment Scale[5] as a tool to describe such in-born differences even in the first days of life. This is not to say that personality is prenatally carved in stone. Rather, we all have certain genetic predispositions. It's Nature *and* Nurture –not just one of the other. We are the products of our genes ***and*** our environment – both in dynamic interplay. [6]

So, on the QUICK SCAN, let's work through your child's behavioral style together. Check off the ratings directly on the QUICK SCAN. If it suits you, feel free to draw a boat part, sing a song verse, or graph a map point. More on all that later in Parts B, C and D of Your Instruction Manual.

Motor Activity

What it means: Some children are hyperactive and act as if driven by a motor. They are constantly moving, restless, and fidgety. Others are underactive and act as if they have no fuel in their tanks. They prefer to stay in one place, sedentary, and still.

"Goodness of fit"

- *"Good for":* **High motor activity** is obviously good for activities that require extra physical energy; such as athletics, dance, and theatre. Being a "mover" is also advantageous in unstructured settings where extra energy creates opportunities for enjoyable activity; for example, the playground or back yard. These children might be better at entertaining themselves because they energetically check things out. And they can be more fun for some similarly active children. On the other hand, naturally **low motor activity** can be good for activities that require long periods of sitting still. These children tend to have an easier time meeting expectations in school or quiet social situations.
- *"Problem if":* **High motor activity** can be a problem if school, home or social settings require sitting or being still for longer periods. Children with **low motor activity** can have a problem if they need to get moving to perform certain tasks. It might be hard for them to keep up or fit in when high physical energy is required.
- *"Parent-child fit*": Parents who have high motor activity may find it easier – in fact enjoyable - to keep up with a high motor activity child. On the other hand, adults who naturally move at a slower pace may find such high energy difficult, if not exhausting or exasperating. Parents who are more sedentary find similar children to

[3] Chess and Thomas, Know Your Child
[4] Chess and Thomas, The New York Longitudinal Study
[5] Brazelton, Neonatal Behavioral Assessment Scale
[6] Matt Ridley, Nature Via Nurture

be relatively easy. Parents who prefer more active lifestyles can become frustrated when their children cannot keep up. It is important for such "motorically mis-matched" parents to remember that low motor activity level does not represent laziness any more than high activity level represents disobedience. Both are just natural tendencies.

Accommodations

- Strategies to accommodate a child's **high motor activity** include limiting the amount of time that the child has to be still. For these bouncy children, parents should plan and encourage physical activity breaks. Sometimes vigorous physical activity can be combined with otherwise sedentary tasks; such as, shooting baskets or playing ping-pong while talking or memorizing. There is an educational movement built upon the importance of "kinesthetic" or movement-based learning. [7] Hands-on experiences, role-playing, and dance allow these active children to use their bodies and make learning more fun. For example, carpentry, cooking, and sports activities can be used to teach measurement, math, and statistics. [8]
- Strategies to accommodate **low motor activity** are designed to facilitate participation without causing frustration. Unlike high motor children who need activity breaks, these low motor children need *inactivity* breaks.
    - For very young children, brief stretches of walking can be alternated with relatively longer periods of being carried or pushed in the stroller. Parents might have to use transportation rather than insisting on long hikes.
    - On the athletic field, underactive children on the soccer field can lay goalie or defense rather than forward or midfield. Baseball is a relatively slow moving sport; especially if you play catcher or first base. Underactive children can enjoy just relaxing in the swimming pool.
    - Some of these slower moving children have a hard time performing certain daily chores; such as, cleaning up or getting themselves dressed. Parents might have to provide more assistance to help them get going. Tasks can be broken down into smaller chunks. These children just might need to be allowed a little more time.

Side notes: In some ways, our modern "screen culture" reinforces sedentary habits. In other ways, our "fast-paced culture" often has too little tolerance for people who simply move at a slower pace. Many people are concerned that this has led to the "medicalization" or "pathologizing" of normal developmental differences.

Astute readers will notice that the first three items on the QUICK SCAN- activity level, impulsivity, and attention span - are in fact three core features of ADHD. True, if there is an impairing degree of hyperactivity, impulsivity, and distractibility - across settings and

[7] Paul E Dennison, Gail E Dennison, Brain Gym: Simple Activities for Whole Brain Learning

[8] Sally Smith, Live It, Learn It

over time - then a diagnosis of ADHD should be considered. [9]Subsequently, a trial of medication might be recommended.[10] However, medication is never the whole answer; rather, part of a comprehensive management strategy including behavior management, educational care, and other psychosocial interventions.[11] Also, as you will see, not all inattention is from ADHD. And not all ADHD -type symptoms are impairing enough to warrant such a diagnosis. In other words, there is a place on the planet for people who are somewhat hyperactive, impulsive, and distractible but do not have a true disorder; just a normal degree of human variation. On the other hand, just because a child is below threshold for a formal diagnosis does not mean that their normal developmental differences might not cause some challenging behaviors. Also, I would like to emphasize that the flipside of an ADHD -like profile can be just as problematic; that is, the child who struggles because of low activity level, too much inhibition, and hyper focusing. (See below.) In this program, I encourage you to just "call it the way you see it" and not get too hung up on formal diagnostic categories.

Impulsivity

What it means: Children with **high impulsivity** act as if they have "no brakes". They have difficulty stopping and thinking before acting. These children live "in the moment", without considering past experience or future consequences. Children with **low impulsivity** act as if they "never take their foot off the brakes". They stop and think too much without acting. These children live too much in the past and the future; perhaps, not enough in the present.

"Goodness of fit"

- *"Good for":* **High impulsivity** can be good for spontaneity and creativity, fun and excitement. **Low impulsivity** is good for staying safe and out of trouble. A little extra caution usually means fewer mistakes. These children usually win when playing "Simon Says"; exercising restraint if Simon doesn't say.
- *"Problem if:* **High impulsivity** can be a problem if situations require a certain degree of self-control. It is normal for babies and toddlers to expect immediate gratification, but as children grow up they must learn to exercise degrees of restraint. These children usually lose when playing "Simon Says"; failing to inhibit when Simon doesn't say. On the other hand, **low impulsivity**, or too much inhibition can be a problem if it interferes with the development of intimacy, trust, and healthy experimentation. These children can be too hesitant, guarded, or anxious. Fewer errors of commission can mean more errors of omission. People grow and learn by experiencing new things and making mistakes. Children who are always thinking, "What's going to happen?" have difficulty enjoying life in the present.

[9] Russell Barkley, Taking Charge of ADHD
[10] Timothy Wilens, Straight Talk About Psychiatric Medications for Kids
[11] Garber, Beyond Ritalin

- *"Parent-child fit":* Parents with relatively **high impulsivity** may be less likely to stop and think ahead on behalf of their children. However, relatively uninhibited parents may find it easier to relax, "connect with" and enjoy their children in the "here and now". Parents with **low impulsivity,** who are more restrained, anxious or even hyper-moral, might be quicker to praise prudence and provide necessary guidance. On the other hand, they could be more prone to reinforce the anxieties of a like-minded child.; or, micromanage and become frustrated with an impulsive child.

Accommodations:

- Strategies to accommodate **high impulsivity** require adults to "accept, loosen up, and chill". Young children do not consistently consider the consequences of their actions. The development of behavioral brakes is a long-term project. Until they develop better self-control, adults can try – within reason - to "let children be children". After all, childhood should be a time of innocence and relative freedom from worry. Children should be allowed to make some mistakes without always having to learn a lesson or endure serious hardship. Children do not need to grow up too fast without any kind of of emotional cocoon. When high impulsivity might put a child at serious risk, then the physical environment should be modified and responsible adults should tighten their supervision. When safety cannot be insured without undue negative feedback, then the activity should simply be avoided or prohibited. The child can be distracted or redirected to safer alternatives. For problematic impulsivity, adults may need to bring the future into the present by providing more feedback, more consequences, more often.
- Strategies to accommodate **low impulsivity** include allowing these overly thoughtful children extra time. If prolonged reflection ultimately leads to action, they need not be rushed. Preview, gradual exposure, and time to acclimate can make it easier for these children to transition and face the unfamiliar. There is significant overlap between accommodations for low impulsivity and negative initial reaction.

Side notes: Attention Deficit Hyperactivity Disorder may be diagnosed when high impulsivity is significantly impairing, across settings, across people, and over time. Despite concerns about over diagnosis and overtreatment, ADHD is a serious condition with serious consequences. In childhood, the gradual development of "behavioral brakes" allows for improved function in the family, with friends, and at school. In adulthood, better self-control can mean a higher chance of success in the larger community and the workplace. Early problems with "behavioral disinhibition" increase the risk of school failure, social difficulties, and family stress. As children with poor self-control get older, they might suffer from negative self-image, accidental injury or death, substance abuse, sexual promiscuity, and other unhealthy behaviors. Marketing strategists capitalize on consumer impulsivity, especially when purchases are just a tap or click away. People who celebrate and glorify impulsivity sometimes tragically confuse uninhibited self-expression with true artistic creativity. A sufficient degree of impulse control may actually represent the foundation of morality itself; that uniquely human ability to pause and free oneself from conditioned reflexes; to sometimes live in the present as if the future depends upon it. [12]

[12] Russell Barkley, ADHD and the Nature of Self-Control

On the other and of the self-control spectrum, low impulsivity can be just as significantly impairing; that is, overinhibition might indicate an Anxiety Disorder. Too much hesitation and self-restraint can cause distress or even paralysis. These children need to ease up on the brakes and "let it roll". They need to live more in the moment and not worry so much about the past or the future. They need to take more risks and not worry so much about consequences. [13]

It's interesting to note, medication used to treat ADHD can cause too much inhibition. Medication used to treat anxiety disorders can cause too much impulsivity. That's why, when ADHD and Anxiety coexist, treatment of one can lead to worsening of the other.[14]

But these thoughts are offered only as interesting considerations. As with all facets of the QUICK SCAN, just because high degrees of impairment can suggest specific diagnoses in some children does not mean that the majority of children with less impairing developmental differences require professional attention.

Attention Span

What it means: Children with a **short attention span** might notice everything all around. They shift rapidly, flitting from one thing to another. They have difficulty focusing on any one thing for long. They are easily distracted. [15]Children with **long attention span** focus on one thing for a long time; sometimes to the exclusion of everything else. They tend to become engrossed in one activity or thought; hyper-focusing or perseverating. They do not easily shift their focus. As discussed in the side notes below, but worth emphasizing here, most children do not have *either* short *or* long attention spans. Rather, attention spans can vary across different tasks and settings. It is common, for example, to have a shorter attention span for non-preferred activities or tasks that tap into weaknesses. Most people have a longer attention span for preferred activities or tasks that tap into strengths. So, when completing the QUICK SCAN, make a generalization about your child's attention span if you can but feel free to specify task and setting–specific differences too.

Goodness of fit:

- *"Good for":* A ***short attention span*** or distractible nature can be good for letting bygones be bygones. Sometimes it is a gift to be able to just move on and let unpleasant thoughts or feelings quickly fade into the past. It is easier for parents to redirect these children away from undesirable activities. Distractibility and "soothability" often go hand in hand. Some children with short attention spans are good "noticers"; that is, they can be more attuned to interesting background details, more fun or sensitive in certain social situations, more appreciative of myriad stimuli in art, music, or nature. ***Long attention span*** or perseverative tendencies

[13] Bonnie Zucker, Anxiety-free Kids and Harold Rapee, Helping Your Anxious Child
[14] Dan Shapiro, "SCADS of Children with Coexisting ADHD, Autism and Anxiety: Understanding and Treating Complicated Problems with Self-Control and Attention Dysregulation," in Attention Magazine.
[15] Hallowell and Ratey, Driven to Distraction

can be good for activities or tasks that require prolonged focus. They may be able to work well even in environments that would be distracting to others. These children might reach surprisingly high levels of achievement and expertise. Success can flow from sustained engagement and concentration.

- *"Problem if":* Obviously, a **short attention span** can be a problem if it interferes with learning, responding to others, and performing necessary tasks. Insufficient persistence and perseverance makes it difficult to work efficiently, complete jobs well, and achieve up to one's true potential. On the other hand, high levels of persistence or **long attention span** can be a problem if a child tends to become too self-absorbed; oblivious to what is going on, missing environmental or social cues. They may be misunderstood and accused of ignoring or rudeness. These children may have trouble shifting from one activity to another. They are not easily distracted or redirected away from undesirable feelings or activities.[16]
- *"Parent-child fit":* Parents with short attention spans may find it difficult to pick up on their children's cues or follow through during some important parent-child interactions. On the other hand, these parents may find it easier to let go of some things that really don't matter. Parents with long attention spans may have trouble just moving on but feel well-suited for working through difficult problems.

Accommodations:

- Strategies to accommodate children with **short attention span** require a high level of adult acceptance, creativity and energy.
    - Children should not be reprimanded or embarrassed if their minds tend to wander.
    - Selectively, parents can lessen some attention requirements and demands. These children should be expected to sustain focus only for as long as there are capable. They may need frequent breaks while doing long or multi-step tasks. By allowing short and frequent breaks, the child may return to the task more successfully. Parents can break-down tasks into small and simple chunks. Instructions should not be complicated or long-winded.
    - Environmental distractions should be minimized. Use multi-sensory presentation or your child's preferred sensory pathways; such as, visual vs. pure auditory. Block, eliminate or tone down undesirable stimuli. At the same time, highlight, amplify, or draw near to the preferred center of focus. For example, in the classroom, distractible children generally do better when seated front and center, away from the outside window or hallway door.[17]
    - Some children find that a regular change of sensory input helps them maintain attention.; such as, changing rooms or seats, or using different color transparencies to read through. Novel approaches to routine tasks are likely to make them more interesting.
    - To keep their minds from wandering, these children may need more one-on-one, more reminders and more feedback. Sometimes, they might just need some help getting started. "I'll do one then you do one…good! Now I'll do one and you do two."

[16] Tony Atwood, The Complete Guide to Asperger Syndrome
[17] Sue Jeweler, Stephan Silverman, Jacqueline Iseman, School Success for Kids With ADHD

    - Secret signals (such as, touching the shoulder, or tapping the desk) can be used to let a child know when their attention seems to be fading.
    - Schedule more challenging tasks for times when a child is likely to be more alert and less distractible.
    - Use special interests and preferred activities to off-set the child's tendency to lose focus. This might mean that you couple learning with computers, movies or video games.
- Strategies to accommodate **long attention span** generally means allowing these children to stay with an activity for longer periods of time. They should not begin an activity that will take them longer than the time available unless they understand that they will have to stop it before completion. Timers, clocks, schedules and warnings may be necessary. Sometimes it is appropriate to prompt and encourage the child to move at a more rapid pace, even imposing time limits when necessary. These children do better if they can see transitions coming well in advance. If persistence is so high that a child becomes too self-absorbed and unsocial, then parents might have to be more deliberate and creative about engagement. Limit the amount of time spent on TV, computers, video games and other isolating activities. For some very perseverative children, there is such a thing as too much time spent reading or doing homework. Try to strike a healthy balance between activities that are done solo and others that require more social interaction.

Side notes: Inattention is a common and important problem of childhood. Unfortunately and all too often, well-meaning adults boil this complicated facet of development down to an overly simplistic question: Does the child have ADHD or not? But inattention is far more intricate than that.[18]

There are at least four possible types of inattention.

1. *Distractible type:* As described above, many children have difficulty with inattention because their attention spans are just too short.
2. *Perseverative type*: Also as described above, some children hyperfocus and pay attention to one thing to the exclusion of others. They are not inattentive. There just not focusing on the "right thing".
3. *Task or setting-specific type: A*ll children have difficulty attending to difficult tasks. As described throughout the QUICK SCAN, a pattern of strengths and weaknesses in other facets of your child's developmental profile could cause this kind of inattention *secondary* to challenges with specific demands, settings or expectations. For example, a child with reading or writing difficulties will naturally have more trouble sustaining focus for that type of work.
4. *Stressed-type:* Many children have difficulty with attention regulation secondary to underlying problems with mood regulation. It is very difficult for anyone to focus when anxious, stressed, or down-in-the-dumps. Sometimes, mood difficulties have nothing to do with the task at hand but still cause powerful distraction. Other times, anticipation of difficulties - real or merely perceived - triggers anxiety or avoidance.

[18] Mel Levine, A Mind at a Time

Some children with inattention have just one of these four factors in play. Others, especially children on the autism spectrum, may have a *"mixed-pattern" of attention dysregulation* involving all four types, stirred together in varying degrees; that is, distractibility, perseveration, task--specific difficulties, *plus* anxiety or other mood disorder.

To complicate things further, most children do not have across-the-board problems or total inability to pay attention. Rather, they have a problem with inconsistent attention. There are two patterns of attention inconsistency.

1. *Predictably inattentive:* Usually, these attention inconsistencies are not random; rather, they are "consistently inconsistent". How well the child is able to focus and sustain attention often depends - in a predictable way - upon the task or situation at hand. Usually, other aspects of the child's profile factor in; especially, their QUICK SCAN Sensory Profile and Skills Profile. For example, it is not unusual for a child to display a short attention span when people are talking (auditory-verbal weakness) but a long attention span for visual-motor activities (relative strength).
2. *Unpredictably inattentive:* Some other children are "inconsistently inconsistent". They have no predictable pattern. Sometimes they bring their "A game". Other times, they just don't. These children are often blamed for their success. In other words, parents and teachers might assume, just because they can pay attention some of the time, they have the capacity to pay attention all the time. Such inconsistency all too often leads adults, peers, or the child him or herself, to the use pejorative labels and comments; such as "lazy", "poorly motivated", or "doesn't care".[19] But if these children could speak for themselves, they would say, "I don't have a problem being able to pay attention at all. I just can't do it all the time. I don't have a total attention deficit. My problem is attention inconsistency. If I could pay attention all the time, I would."

Initial Reaction

What it means: Children with **negative initial reaction** are generally "slow to warm-up." When encountering new situations, these children tend to take a first step backward; as if saying, "I'm not so sure about this." Children with **positive initial reaction** are "quick to warm-up." These children are usually eager to experience new things. They tend to take a first step forward; as if saying, "Hey, check it out!"

"Goodness of fit"

- *"Good for":* ***Negative initial reaction*** can be good for avoiding unsafe or undesirable situations. A little bit of natural caution can help keep these children from getting sucked too easily into trouble. Parents can imagine many situations, from early childhood through adult life - social, sexual, recreational - in which a bit of natural hesitation would be protective. A tendency toward ***positive initial reaction*** is obviously good for making unfamiliar transitions. Social interaction can come more naturally when a child is intrinsically trusting and open. For these

[19] Mel Levine, The Myth of Laziness

children, variety is the spice of life. A willingness to experience new things can enhance growth and development.

- *"Problem if":* **Negative initial reaction** or instinctive withdrawal can be a problem if children avoid activities that are safe, possible growth experiences and fun. Ordinary, desirable or necessary transitions might be way too difficult. Change can be harder than it needs to be. On the other hand, ***positive initial reaction*** or relative lack of caution can be a problem if the situation is risky or dangerous. Novelty and excitement can draw such children into unhealthy or dangerous relationships and behaviors. For these children, the lines between innocence, naiveté and victimization can be all too thin.
- *"Parent-child fit":* **Negative initial reaction** *or* slow to warm-up parents can demonstrate a healthy degree of prudence in some situations but too much caution in others. Slow to warm-up parents are likely to feel some tension or anxiety if they have a quick to warm-up child. Parents who tend to have a **positive initial reaction** might not model sufficient caution. If their child is relatively cautious, then quick to warm-up parents might become impatient or frustrated.

Accommodations:

- Strategies to accommodate **negative initial reaction** include limiting unnecessary and unsettling exposures. A certain amount of familiarity is essential for emotional stability. These children should not be required to tolerate too many new experiences and transitions. When avoidance of novelty is not practical or desirable, parents should understand that the child's first reaction might not represent their true potential interest. Parents should go by what they think will happen after their child is over that first hump of resistance and not be too discouraged by initial resistance. In these cases, it is ok to push these children to "just try it" and "give it a chance" before deciding. Children can be reminded about previous times when they did not want to try something but ended up enjoying or profiting from the experience. There is an interesting overlap between initial reaction and adaptability. (See below.) For children who are *initially* slow-to-warm up and *remain* inflexible *over time*, gradual exposure can be helpful; like acclimating gently to cold water by putting one toe in the pool at a time. On the other hand, for children who are initially slow-to-warm-up but then generally adapt well, gradual exposure just prolongs the torture! These children do better if they just jump right into the deep end, get through the transition phase more quickly and let their adaptability strengths kick into gear. These generalizations about temperament can help parents predict whether their child will do best with an approach that is gradual, prolonged, incremental and step-by-step or an approach that is more "cold turkey," "get it over with all at once," and quicker. These considerations come in handy when managing a variety of common problems with novelty and change; such as, dropping off on the first day of nursery school, kindergarten, or even college; or managing problems with sleep initiation, picky eating, or social success.
- Strategies to accommodate **positive initial reaction** include extra supervision and explicit rules, especially when safety is an issue. Environments must be more tightly controlled when the child's first reaction cannot be trusted. Parents should understand if these novelty seeking children are drawn to certain activities then

quickly change their mind. Excessive curiosity just requires more explicit teaching rather than admonishment or punishment. Some novelty-seeking and risk-taking should not only be tolerated but encouraged.

Side note: In completing the QUICK SCAN, parents often ask, "Where do I put anxiety?" After all, Anxiety Disorders affect at least 10% of all children; the most common of the developmental disabilities. And negative initial reaction might not capture all Anxiety. So why isn't there an additional QUICK SCAN item called "Anxiety"?

Most developmental differences of childhood cannot be plunked neatly into one diagnostic box. When we're talking about Anxiety, there are usually many variations, many sub-types and many factors at play.[20] This heterogeneity is just as true across other diagnoses; such as, so-called "Oppositional-Defiant Disorder", Autism, ADHD, learning differences and sensory differences. The QUICK SCAN splits apart and captures complexities of your child's profile that traditional diagnostic categories lump and lose.[21]

To demonstrate the point, let's break the anxiety box down into more meaningful QUICK SCAN facets. Anxiety can stem from a temperament marked by various degrees of negative initial reaction, low adaptability, and low impulsivity. Anxiety can come and go with general fluctuations in mood. Some children can be worried sick today and totally chill tomorrow. Beyond behavioral style, anxiety is often task and setting-specific. For example, one child's insect phobia may be another child's social anxiety. Anxiety can be secondary to specific sensory stimuli; ranging from haircuts to swimming pools. Anxiety can be tied to specific learning difficulties; such as, reading, writing, math or study skill deficits. Environmental stresses may be relevant; for example, when there is a birth of a sibling, marital discord, trauma or a move to a new home. Anxiety may be secondary to medical problems; for example, allergies, asthma or constipation. There are so many different types of anxiety; generalized, specific phobias, obsessive-compulsive disorder, post-traumatic stress, social, performance, and more. And anxiety manifests in so many different ways; headaches, stomachaches, aggression, withdrawal, avoidance, sleep disturbance and more. Anxiety changes over the years; shifting, for example, from separation anxiety in preschool, to burglars in early childhood, then performance anxiety in high school. The relative importance of underlying factors changes as children travel through different developmental phases. Good assessment should result in an accurate description of all these factors and manifestations. The QUICK SCAN facilitates this kind of multidimensional assessment. Successful management of anxiety depends upon understanding this complexity.

Adaptability

What it means: When situations prove challenging or unpleasant, children with **high adaptability** easily make adjustments. They are flexible and naturally "go with the flow".

[20] Bonnie Zucker, Anxiety-free Kids and Harold Rapee, Helping Your Anxious Child

[21] Toward the future of psychiatric diagnosis: the seven pillars of RDoC, Bruce N Cuthbert Thomas R Insel, BMC Medicine201311:126, DOI: 10.1186/1741-7015-11-126© Cuthbert and Insel; licensee BioMed Central Ltd. 2013, Received: 23 October 2012Accepted: 13 March 2013Published: 14 May 2013

Children with **low adaptability** do fine along their chosen path but do not feel comfortable shifting course. They tend to be inflexible and strong-willed.[22]

"Goodness of fit"

- *"Good for":* **High adaptability** or natural flexibility is good for getting along with others. These children are more accepting of differences. They are ok with compromise. They tolerate physical and emotional discomfort. When things prove difficult, they adjust. They look for different ways to solve problems. When solutions prove elusive, they are open to suggestion. But **low adaptability** has its advantages too. Inflexibility can be good for maintaining healthy habits. Once desirable routines and morals are internalized, these children naturally protect themselves in unsafe environments. They are less likely to follow negative examples or bend to the influence of others. Some of the most inflexible children grow up to some of the world's greatest leaders.
- *"Problem if":* **High adaptability** or flexibility can be a problem if the child uncritically accepts undesirable influences. Some of these children are too ready to fit in. They might follow when they should lead. **Low adaptability** can be a problem if adjustments must be made. Some situations require children to transition smoothly and accept change. These children can have trouble with "micro- transitions"; such as, the morning routine at home or activity shifts at school; or with "macro-transitions"; such as, beginning a new school year, losing a friend, or a parent starting a new job. Relatively inflexible children may cause others to feel stressed, frustrated, sad, or angry. Children who are slow to make adjustments might exclude themselves from important activities, opportunities, or relationships.
- *"Parent-child fit":* High adaptability parents have an easier time accepting life's inevitable surprises, challenges, curveballs and set-backs. Sometimes, being too flexible is a disadvantage when parents need to take a strong stand despite pressure or uncertainty. When parents and children are both inflexible, they do well in the absence of conflict. However, trouble can be amplified and prolonged when two inflexible parties need to adjust or compromise.

Accommodations:

- Strategies to accommodate children with **high adaptability** are generally not necessary, as these children are so ready to accommodate others. However, parents might have to exercise greater vigilance monitoring such a child's environment for undesirable activities, ideas and friends. Fortunately, these children should be able to adapt just as well to healthier alternatives.
- Strategies to accommodate children with **low adaptability** require parents to provide extra preview and warm-up time in new or unexpected situations**.** These children will always do best if given plenty of advance warning regarding necessary adjustments. Whenever possible, they should first receive coaching and practice then brief and frequent exposure. Desensitizing exposures can gradually increase in duration, intensity, and unpredictability; giving the child as much time as necessary to acclimate. In general, these children do better with this kind of preview, rehearsal, practice and incremental warm-up. "Sink or swim" approaches usually backfire causing low adaptability children to

[22] Stanley Greensapn, The Challenging Child

sink. Unnecessary or potentially overwhelming change should be kept at a minimum. If feasible, when one change has to be made, other changes should be postponed.

Side notes: Adaptability can be inborn and hardwired; a cradle-to-grave character trait. However, just because people may be born with certain predispositions does not mean that such tendencies are carved in stone. With time, changing circumstances, hard work, and help from others, there is not a single facet of your child's developmental profile that cannot change. In fact, all facets usually do change; even if, only to a certain degree. Ironically, Nelson Mandela's greatness was in large part due to his extraordinary inflexibility in the face of injustice; both before and during his prison years. However, his ability to build a new coalition government in South Africa - with the same leaders of apartheid who jailed him for nearly 3 decades on Robin Island - was due to his extraordinary adaptability.[23]

Inflexibility is often secondary to other aspects of your child's developmental profile. For example, children with long/perseverative attention spans, high self- inhibition, and negative initial reaction may come across as being inflexible when all they really need is a little extra time to shift focus, relax, and acclimate. As we will see in discussing more facets of your child's profile below, individuals with either over- or under-responsive sensory systems can have secondary problems responding flexibly to environmental stimuli. And any skill deficit can masquerade as inflexibility; simply, it's hard to adapt when something is difficult.

For example, low adaptability is a very common problem in children who have weak language skills. Inflexibility can be a direct consequence – perhaps the most obvious symptom – of difficulty understanding or expressing complicated language. Some children have excellent language skills on standardized testing. However, when stressed or emotionally flooded, they struggle to process or organize language on demand. Other children simply don't have the words. Either way, a child who only thinks in black and white, will have difficulty seeing all the in-between shades of gray. For these children, there are no numbers 1 *through* 9; only 0 *or* 10. There is no yellow light; only red or green. There are no alternative plans B through Z; only plan A. There is no compromise; just your way *versus* my way. There is no earthly variation; only heaven *or* hell. If life isn't perfect, it might not seem worth living.

It is not unusual for these linguistically limited children to express their frustration in alarming ways. If a parent does not yield to such a child's inflexible demands, the child might say, "I'm going to kill you!" If the child is not able to perform up to their own expectations, they might threaten to kill themselves. Such children are not truly homicidal or suicidal; nor, deep down, as poorly adaptable as they seem. They are simply defaulting to "black-or-white/ all-or-none" language and behavior for lack of skill generating more nuanced and adaptive alternatives. Without the language to think and express "many shades of gray", a child's conceptual, emotional, and behavioral menu can be very limited. In this way, language (or other) skills deficits can masquerade as unmodifiable inflexibility. But these children may not be so inflexible as they seem. They just need more words. With

[23] Nelson Mandela, Long Walk to Freedom

help, they can learn the language of emotional intelligence - or correct other skill deficits - *underlying* their inflexibility. Not easy, but possible.

Intensity of Reaction

What it means: Children with **high intensity of reaction** tend to be loud and demonstrative. Whether their feelings are positive or negative, those feelings are "all out there" and obvious. Children with **low intensity of reaction** tend to keep their feelings to themselves. They "fly under the radar" and "hold their cards close to their chest". These children may be harder to read.

"Goodness of fit"

- *"Good for":* **High intensity of reaction** is good for drawing attention to legitimate needs. Sometimes the squeaky wheel truly does need to be greased. These children are unlikely to have their needs ignored. They let others know how they feel. Such openness and transparency may be necessary for mature communication and deep relationships. A tendency to display one's emotions can also be a positive source of entertainment and joy for others. Their contagious laughter and effervescent spirit can make such children the life of any party.[24] But children with **low intensity of reaction** have potential upsides as well. More reserved and restrained children can be less obtrusive. These children can be easier to live with. Such children (and adults) might be admired as "strong quiet types".[25]
- *"Problem if":* **High intensity of reaction** can be a problem if a child too often "cries wolf". Parents (and Pediatricians!) may not be sure how seriously to take frequent and dramatic complaints. Others may perceive a child's demonstrative style as loud, obnoxious, irritating or insensitive. On the other hand, children with generally **low intensity of reaction**, who tend to keep their feelings under wraps, can have their physical distress or inner emotional life go unnoticed and unattended. Such under-reporting can make it difficult for adults to respond and provide validation. Sensitive parents learn not to take everything at face value and gently dig a little deeper. Experienced Pediatricians learn very quickly which infants and children "cannot be trusted" to display important symptoms of illness. [26]
- *"Parent-child fit":* If a parent and child both have "high voltage" tendencies, there is wonderful potential for shared joy and excitement. Interpersonal connection can be deeper when people are naturally open with each other. However, successive volleys of high intensity negative reaction and higher intensity counter-reaction can quickly escalate and spin out of control. A pattern of perpetual conflict can result from such similar but incompatible behavioral styles. High intensity parent-child dyads might have a hard time finding the source of the fire through all the smoke. They might fight then forget what they were fighting about. Parents who have low sensory thresholds (see below) might have a harder time with such high intensity children. These parents might cling to old-fashioned views; such as, "Good children should be

[24] Mary Sheedy Kurcinka, Raising Your Spirited Child, February 24, 2009
[25] Susan Cain, Quiet: The Power of Introverts in a World That Can't Stop Talking, January 29, 2013
[26] Barton Schmitt, Your Child's Health

seen and not heard;" or, "Good children should not speak unless spoken to". On the other hand, parents who are less sensitive and have a lower intensity or reaction are less likely to fuel these emotional spirals. Although they are relatively unlikely to get sucked into power struggles, such quiet parents may be more difficult for their children (and spouses) to read. This can be a problem for children who might need a more animated and amped up style of engagement and communication. Parents who have very high sensory thresholds or inattentiveness should be particularly cautious about overlooking these children.

Accommodations:

- Strategies to accommodate children with **high intensity of reaction** require parents to mind the difference between style and substance. The child's manner of communication may not accurately reflect the magnitude of the issue. So these parents should not over-react, either positively or negatively, to their child's drama. Such children tend to provoke parents to feel helplessness or rage; leading to avoidance or counter-intensity. This is not to say that the high intensity child's feelings should be discounted or ignored. It is just the depth or volume of display that might be out of proportion. Before rushing to judgment or action, parents should objectively evaluate the substance of the issue; if necessary, gather data from other sources. They should deliberately pause, evaluate the true nature of the issue and avoid getting sucked into the child's high drama. Parents should not give-in for the sake of peace. Nor should they fight back for the sake of justice. They should respond with equilibrium and wisdom. For example: "I can tell how upset you are. And I think I understand why. Let's wait until we can both be calm and work through this problem together." Nobody can effectively problem-solve when smoke is coming out of their ears. That goes for children and parents. Giving these children socially acceptable outlets for their high intensity is important. The bedroom, the basement and the backyard are usually better suited for venting than the family room, dining room, or most public places. Punching bags and pillows can be handy. If it helps, parents can provide places, times and activities that allow these children to blow off some steam. There is a limit to how much we should encourage children to "let it all out". To a certain degree, children (and parents) should learn to "let it go".[27]
- ***Strategies to accommodate*** children with **low intensity of reaction** involve maintaining a high level of suspicion. Minor complaints and subtle symptoms should be taken seriously. Adult antennae need to be way up. These children might be experiencing more distress than they show. The depth of feeling may not be adequately displayed. More demonstrative siblings or peers might deprive these quiet ones of their due attention. Parents and teachers should be sure to distribute their time thoughtfully. Parents who place a high value on expressiveness may just need to accept and enjoy such a child's more reserved manner.

Side notes: Across all facets of your child's profile, "goodness of fit" does not just depend upon the behavioral style of parents and others but also on setting, context, and culture. This is especially true regarding intensity of reaction. Children with high intensity of reaction can

[27] Thich Nhat Hanh, Anger

fit more naturally at the swimming pool, playground, and other settings where it's fun and appropriate to "let it all out". High intensity of reaction is more often the cultural norm in Mediterranean, Latin, and US Coastal (East and West) communities. Children with low intensity of reaction might not seem to fit as naturally in these environments and cultures. More subdued children might seem to do better in school, religious services, and other activities where quiet behavior is expected. Low intensity of reaction may be the more common cultural expectation in some Asian, Eastern European, Scandinavian, and US Midwestern and Southern communities. In some cultures, what might be considered a problematic – even pathological - degree of extroversion or introversion, in other cultures, might seem relatively normal or even admirable. In this way, there can be a problem if the child's natural intensity of reaction – high or low – is inappropriate for a specific setting or falls outside of his family or community's cultural norms.

Each facet of your child's profile exists in dynamic interplay with every other facet. Previously, we considered the interplay between initial reaction and adaptability. Here, let's examine the overlap between intensity of reaction, social skill, and adaptability. In the discussion of social skills below, we will consider how easy or difficult it is for some children to read social context and modify their intensity of reaction (along with other aspects of their behavioral style) accordingly. Socially-attuned adjustments in intensity of reaction can be simple; such as, shifts between "inside-voice" and "outside-voice". Other context-driven adjustments in intensity of reaction can be more complex and nuanced.[28] For example, there are very different greetings across cultures. In some communities, people expect a quiet bow and downcast eyes. In others, it is normal to give prolonged and exuberant hugs with double-kisses on each cheek! For some children more than others, this kind of "context-reading" and "social shifting" can be difficult. The consequences can be humorous or serious.

Mood

What it means: Some children tend to "see the glass half-full"***.*** Even when the chips are down, children with a generally **positive mood** just seem to carry a smile on their faces. They are usually relaxed, optimistic, and happy. Other children with generally **negative mood** tend to "see the glass half-empty". Even when things are going well, these children just seem to be serious, sad or – most commonly - irritable.

"Goodness of fit"

- *"Good for":* A generally **positive mood** and cheerful predisposition is obviously good for the child and for others. Who doesn't enjoy feeling happy and being around happy people? On the other hand, **negative mood** can be a reflection of seriousness of purpose. Some great champions of social justice and humanity carried a sad or even angry predisposition. Their deep sensitivity and passion stirred them to act, serve, create, and inspire. A smiley face is not necessary for a good life. For example, in some families and cultures, far more importance is attached to meaningful work and good deeds.[29]

[28] Nowicki and Duke, Teaching Your Child the Language of Social Success
[29] Martin Seligman, Authentic Happiness

- *"Problem if":* A **positive mood** or perpetually sunny demeanor might be a problem if it is socially inappropriate. If someone's mood seems disconnected from sad or serious events, it might come across as insensitive. To others, this perpetual sunniness can be socially off-putting or irritating. Of course, **negative mood** or melancholia can be a problem if it causes too much distress; not just for the child but for others too. Pessimistic individuals are not often fun to be around. Of greatest concern, negative mood can be truly impairing, socially and developmentally. Some people can be disabled by their darker emotions. Keep in mind: the most common symptom of depression in childhood is irritability; not sadness.[30]
- *"Parent-child fit":* Parents who carry a positive mood have obvious advantages. However, they may have some difficulty understanding their child with a more serious nature. Adults who are naturally or culturally conditioned to place high value on a rosy predisposition may have a hard time accepting thornier definitions of the "good life". Parents with a negative mood may find that their pessimistic outlook is contagious; either amplifying a similarly predisposed child's helpless feelings or confusing a child who would otherwise tend towards the positive.

Accommodations:

- Strategies to accommodate **positive mood** are generally not necessary. The only real concern (as with high adaptability) might be gullibility. There are some situations that a child should not feel good about. Parents may need to monitor, supervise and restrict if such overly-optimistic and innocent children might come to harm. Parents may need to help these children examine some social and moral issues more explicitly, objectively and critically. For these children, "If it feels good do it," might result in them doing just about anything.
- Strategies to accommodate **negative mood** should begin with loving acceptance of the child's behavioral style. Adults should not take such a child's negative mood personally or pessimistically. For some (not all) very healthy individuals, it's just the way they are. Do not react with counter-negativity, frustration, blame or guilt. Do not feel compelled to be a cheerleader. These children should not be coached to, "Just put on a happy face!" Such a child may just show his level of interest and enjoyment differently; such as, through level of attentiveness and engagement rather than number of smiles and laughs. Parents of children with negative mood should be no less available and attentive.

Side notes: Mood is a complicated facet of your child's profile; stemming from a combination of factors; genetic, environmental, and experiential. As discussed elsewhere in the *Parent Child Journey*, Martin Seligman, the father of Positive Psychology, traced depression in many to an unhealthy habit of negative "self-talk or explanatory style".[31] He studied dogs, life insurance salesman, and Olympic hopefuls. When faced with adversity or failure, he found that pessimists tend to take things too *personally*. They jump to conclusions about the *permanence* of a bad situation. And they tend to generalize their failure in one situation to a *pervasively* helpless/ hopeless attitude about their chances of achieving any kind of success. The three Ps of this Pessimistic response to failure - that setbacks seem *personal, permanent, and*

[30] Harold Koplowicz, More Than Moody
[31] Martin Seligman, Learned Optimism

pervasive - present the "mud" of self-fulfilling prophecy into which too many children (and parents) fall and get stuck. On the other hand, Seligman found that children and adults with a positive mood are better grounded in hopeful self-talk. When these optimists faced failure, they just called it bad luck, nothing personal; a setback, not permanent; just one failure, not necessarily a barrier towards future success.

Along the same lines, Carol Dweck writes about two different kinds of "mindsets".[32] People with a "fixed mindset" view abilities, intelligence, and talents as if "carved in stone". They feel that, "We are who we are - and that's that." Their goal: just try to look smart, not dumb; always succeed, don't fail. On the other hand, people with a "growth mindset" tend to think that talents and abilities can be developed through effort, good teaching, and persistence. It's not that everyone is the same or that anyone can be an Einstein. But everyone can grow, learn, change, and achieve more success. Similar to Seligman's optimists, children and parents with Dweck's "growth mindset" see mistakes and failures as opportunities to learn more, work harder and do better.

So if your child is predisposed to a negative mood or even clinical depression, don't have a pessimistic or fixed mindset about that. In the *Parent Child Journey*, we will return to this important subject. In a highly individualized way, you will learn how to help your child define problems in specific and solvable terms then practice effective problem-solving skills – with hope and optimism.[33]

Regularity/ Predictability

What it means: Children with **high regularity and predictability** act as if an internal clock governs their body functions, behavior and mood. Their parents know exactly what to expect. They know when these children will wake-up, go to sleep, go to the bathroom, feel hungry and play. Parents of regular children may even be able to tell when they will be happy or sad. With these children, there are very few surprises.

Children with **low regularity and predictability** seem different every day. Their parents learn to "expect the unexpected". These children are "consistently inconsistent" regarding mood, wake-sleep cycles, and daily activities. They do not easily internalize daily routines. They might shift through monthly, weekly or even daily cycles of change. Sometimes their emotional "skin" can seem "thick"; other times, "thin". Parents of these children never know "which kid" they're going to get.

"Goodness of fit"

- *"Good for":* **High regularity and predictability** are good for scheduling. Life is usually easier when everyone knows what to expect – and when. Plans can be made with little chance of surprise or disruption. A certain amount of biological

[32] Carol Dweck, Mindsets
[33] Brooks and Goldstein, Raising Resilient Children

rhythmicity can lead to the development of healthy habits, efficiency and peace. Such steadiness can also make it easier to fit in and get along with others. These predictable children engender feelings of reliability and trustworthiness. **Low regularity and predictability** can be good for getting along with others who are also relatively unscheduled. These children might be more tolerant of disruptions to routine. Some people argue that mood instability can be good – even a necessary ingredient - for artistic inspiration. Myths abound and research seems to confirm a connection between "the unquiet mind" and creative genius.[34] Some people speculate that civilization would have been deprived of artistic masterworks if, for example, Van Gogh and Beethoven had been less volatile.

- *"Problem if":* **High regularity and predictability** may be a problem in the face of unexpected change or if such a child's preferences cannot be accommodated. Other people's schedules will not always fit the child's. On the other hand, **low regularity and predictability** can be a problem if certain routines must be imposed. There is a difference between irregularity and flexibility. Just because a child is unpredictable does not mean that s/he will tolerate unpredictability in others. However, it does mean that parents will have to tolerate unpredictability in the child. The behavior of these children can be very upsetting and difficult. The irregular child might feel confused or out of control. Parents, family, and teachers might over-react and let their own moods ride up and down with the child's. Although irregular shifts in the child's mood might not accurately reflect his or her true desires, family and social relationships can become strained when this instability and unpredictability is misunderstood.
- *"Parent-child fit":* Very regular parents may have difficulty with very unpredictable children. High regularity parents and children may have an easier time with each other when their schedules are in-sync but tension when marching to the beat of different drummers. Parents who are irregular may have difficulty with a child who is more schedule-bound. Disorganized or spontaneous adults, who like every day to be different, will obviously have a harder time changing their own behavioral style to accommodate a naturally regimented child. More adaptable/ low intensity of reaction parents will have an easier time with unpredictable children. Parents with high mood stability more naturally give their children a sense of security. Parents who have difficulty maintaining emotional equilibrium may struggle to meet normal child-rearing challenges.

Accommodations:

- Strategies for accommodating **high regularity** usually require some degree of adjustment to the child's natural schedule. If times for eating, sleeping, toileting, studying and playing can be set by the child and accommodated by the adults, then life is simple. The more routine, the better. Highly regular children should be given lots of warning and choices if their usual schedule has to be disrupted. Parents might choose to excuse these children from some disruptions to avoid unnecessary stress. If adults cannot anticipate changes in routine far enough ahead, then they can respond sympathetically and try to preserve as much of the child's preferred schedule as possible. If certain activities cannot occur at the usual time, maybe they can at least happen in the same way.

[34] Kay Redfield Jamison, The Unquiet Mind

- Strategies to accommodate **low regularity** should be considered for children who cannot easily meet certain scheduling requirements. If the child is "predictably unpredictable", then parents might just have to learn to go with the flow; or at least, have a Plan B for every Plan A. Insisting upon an overly rigid schedule will backfire. Compromise is necessary. For example, an acceptable range for bed times or eating times might work better than one mandatory time. A distinction can be drawn between *set bed time* (with quiet independent activities) and *flexible sleep time* (left more up to the child in accommodation of his or her fluctuating biorhythms). If some meals have to be relatively fixed, other mealtimes could be allowed to float. Strategies to accommodate low mood stability include understanding that such mood swings are truly nobody's fault. These children simply can't control their mood like other children. Parents should look for patterns to better anticipate triggers and cycles. But this is not always possible. The unpredictability of these swings might simply require a high degree of acceptance. Drawing, music, writing, dance and other creative outlets may help these children channel their rising and falling moods. Learning to put their feelings into words can help these children gauge their current mood and make appropriate adjustments. Ideally, parents and child can see down cycles coming and make timely shifts to less demanding and stressful activities.[35] During times of relative emotional stability, the child can be encouraged to pursue activities and interactions that might be difficult to handle at other times.

Side notes: Your child's irregularity and unpredictability may not be as random as it seems. Let's consider two "patterns of patternlessness":

- *Secondary irregularity:* For some children, there are underlying triggers. What's not immediately obvious might be extremely important. When you take a step back and carefully analyze the ups and downs, many of these overly sensitive children are reacting to hidden problems. Their unpredictability represents just the visible tip of an underwater iceberg. In these cases, irregularity is often secondary to negative initial reaction, inflexibility, sensory over-responsiveness, skill deficits and/ or other environmental stresses. Without going on a wild diagnostic goose chase, a pediatrician should be consulted to rule out hidden medical problems. Extreme irregularity may seem random if relatively minor triggers are considered separately. But it's the combination of factors that can pass a cumulative tipping point. Understandably, parents – and professionals – often struggle to identify such subtle but significant triggers. But it's worth trying. If you can put your finger on the main source (or sources, you can render your child's "unpredictability" more predictable.
- *Primary irregularity:* For other children, there really aren't any identifiable triggers. These children are truly and unpredictably unpredictable. Whether we are talking about irregular bowel, bladder, sleep, eating, mood or behavior, parents of these irregular children never know what they are going to get: Kid A, Kid B, Kid C or even D! Still, parents of children with this kind of untethered "shape shifting" can often describe general rhythmic patterns. Some children cycle from one mode to another hour by hour; others, day by day, week-by-week, month-by-month, season by

[35] Pat Harvey and Jeanine Penzo, Parenting a Child Who Has Intense Emotions: Dialectical Behavior Therapy Skills to Help Your Child Regulate Emotional Outbursts and Aggressive Behavior

season, or longer. If shifts are very extreme, binary and prolonged, then there is a higher chance of true psychiatric illness; namely Bipolar Disorder. However, most of these children have a different kind of Mood Disorder with a better prognosis than Bipolar.[36] And the overwhelming majority of children with poor mood regulation just have challenging temperaments – not a serious mental health problem. There is good news about high irregularity: Usually, Mother Nature is on our side. Over the years, as brains mature, most of these children settle into more predictable patterns.

Here, it seems appropriate to make a few comments about the interplay between culture and temperament; not just regarding regularity and predictability; but more broadly, about human variation in general.

For good and bad, the medicalization of developmental differences is here to stay. Following the publication of some poorly controlled studies and sensational books,[37, 38] it seemed like every child with behavioral irregularity or mood instability was being diagnosed with Bipolar Illness. Some of these children had significant problems with irritability and explosiveness but not the kind of prolonged cyclical episodes seen in true Manic-Depressive Disorder. Other children received a diagnosis of Bipolar when they were really just having medication side effects. Parents were told that their children had serious lifelong psychiatric illness. Potent medications were prescribed. Let me emphasize: Bipolar illness is real, requires accurate diagnosis and comprehensive treatment; usually including potent medication.[39] However, I have seen many children with low regularity - and other challenging temperaments - whose differences in behavioral style simply needed to be understood, not diagnosed; accommodated, not fixed; accepted, not mourned.

Cultural factors may be having a strong negative impact on the development of internal regulation. Over the last century, modern lighting and air conditioning have eliminated natural distinctions between day and night. Increasingly, indoor existence has blurred the change of seasons. More recently, the ubiquity of electronic screens, large and small, has had a profound impact on family communication, relationships and activities. Extraordinary performance pressures, at school and work, have cut into family meals and other important rituals. Parents feel more pressure to have perfect children. Children put more pressure on themselves. In so many ways, the world feels less safe and secure. These seismic cultural shifts have had a profound impact on the development of behavioral regularity. Maybe our society, not your children, needs more diagnosing and more fixing. In today's chaotic world, isn't it even more important to have established routines, daily touchstones, family traditions, and community events? To foster emotional resilience, maybe we should stop

[36]E Leibenluft et al, Severe Mood Dysregulation, Irritability, And The Diagnostic Boundaries Of Bipolar Disorder In Youths, American Journal of Psychiatry, 2011

[37] Janet Wozniak, M.D. *, Joseph Biederman, M.D., Kathleen Kiely, B.A., J. Stuart Ablon, B.A., Stephen V. Faraone, Ph.D., Elizabeth Mundy, B.A., Douglas Mennin, B.A, Mania-Like Symptoms Suggestive of Childhood-Onset Bipolar Disorder in Clinically Referred Children, Journal of the American Academy of Child & Adolescent Psychiatry, Volume 34, Issue 7, July 1995, Pages 867-876

[38] Demitri Papolos, The Bipolar Child: The Definitive and Reassuring Guide to Childhood's Most Misunderstood Disorder, Third Edition Paperback, October 2, 2007

[39] Jon McClellan, M.D., Robert Kowatch, M.D., Robert L. Findling, M.D., Practice Parameter for the Assessment and Treatment of Children and Adolescents With Bipolar Disorder, The Work Group on Quality Issues, Journal of the American Academy of Child and Adolescent Psychiatry, January 2007Volume 46, Issue 1, Pages 107–125

accommodating cultural instability and start repairing these crucial foundations. If you're not already having regular family dinners, that might be a good place to start.[40]

This concludes our discussion of temperament. Now for a discussion of various sensory profile.

Discussion** of **Sensory Profile

The QUICK SCAN prompts you to describe eight facets of your child's sensory profile:

- **Hearing Speech**
- **Hearing Noise**
- **Vision**
- **Taste**
- **Smell**
- **Light Touch**
- **Deep Touch**
- **Movement/Body Position in Space**
- **Internal Body Awareness/Physical Symptoms**

In this section of the QUICK SCAN, you will be making generalizations about your child's sensory reactivity; that is, whether your child has relatively high or low responsiveness to a variety of sensory stimuli. Sensory differences are important; affecting all aspects of mood, behavior, socialization, and learning. Throughout life, sensory differences can influence personal preferences regarding eating, toileting, recreation and sexuality. Understanding your child's sensory profile will help you custom-design effective strategies for engagement and communication. Through detailed understanding of your child's sensory profile, you will be able to move beyond general recommendations to "use multi-sensory techniques" to more specific and individualized sensory strategies.[41]

Sensory strategies always work best if integrated with an understanding of your whole child. The sensory brain is super-cross-wired with every other part of the nervous system. Consequently, your child's sensory differences exist in dynamic interplay with all other facets of your child's profile. Over and under reactivity, in any sensory domain, can effect motor activity level, impulsivity, attention, initial reaction, flexibility, intensity of reaction, mood, and regularity; plus the whole range of skill strengths and weaknesses. Likewise, all these other facets of your child's

[40] Laurie David, Kirstin Uhrenholdt, The Family Dinner: Great Ways to Connect with Your Kids, One Meal at a Time
[41] Carol Kranowicz, The Out-of-Sync Child

profile have a profound impact on sensory processing. To give just one example, children with high sensory reactivity tend towards negative initial reaction. If they were not so hypersensitive, they would be less anxious. Conversely and just as true, children with negative initial reaction will tend towards high sensory reactivity. If they were less anxious, they would be less reactive to sensory stimuli. Keeping this interplay in mind, it is often easier to change a child's sensory reactivity by first targeting other aspects of their developmental profile.

Directly changing a child's sensory system can be difficult.[42] A variety of sensory therapies are touted to rewire the sensory system. Proponents of these interventions claim that they can help both over-sensitive and under sensitive children towards a more favorable middle ground. Obviously, all children should be routinely screened and treated for hearing and vision deficits. But what about the myriad approaches available for other problems with sensory reactivity. There is auditory training, eye muscle exercises, and oral therapies; brushing, pressure, spinning, and biofeedback; plus other occupational/ sensory integration therapies. Although these interventions can help some children, especially when coupled with behavioral strategies targeting specific and measurable goals, the scientific evidence-base for stand-alone sensory therapies is disappointing. The emphasis throughout most of the *Parent Child Journey* will be on appreciating, understanding, and accommodating sensory difference; but not intervening to rewire your child's sensory profile per se.

For the QUICK SCAN, eight facets of the sensory system have been chosen somewhat arbitrarily. In many sections, I will comment on how each sensory facet could be subdivided even further. For example, touch has already been divided into "deep" and "light" touch. But I could have added other types of touch; "vibratory", "temperature", "stereognosis" (the ability to recognize objects through touch alone) and "pain" (of many different types) – to name just a few. Furthermore, I could have added a number of other sensory facets. For practical purposes, I have tried to simplify. Parents are encouraged to lump if possible but split if necessary. Try to make meaningful generalizations but feel free to subdivide or add categories if it helps paint a fuller and more accurate picture of your child. Despite these caveats, I hope the sensory categories suggested in the QUICK SCAN prove useful to most.

While completing this section of the QUICK SCAN, keep in mind that most children are not hypersensitive, average, or under-sensitive across the board. It is more common for children to have "mixed" and/ or "inconsistent" sensory profiles. By "mixed", I mean that children can be hypersensitive to some types of stimuli and under-sensitive to others. For example, many children are very sensitive to visual stimuli and light touch but under-responsive to

[42] Sensory Integration Therapies for Children with Developmental and Behavioral Disorders, Pediatrics, June 2012, VOLUME 129 / ISSUE 6

speech and deep touch. Furthermore, by "inconsistent", I mean, sensory reactivity can change with mood, fatigue, or other underlying reasons. Most children are more reactive if a sensory stimulus catches them by surprise but less reactive if they know what's coming. On the other hand, some children might be under-responsive unless they have their sensory "antennae" up with their sensory "receiver" switched to the right channel; ready for transmission. So, your child's QUICK SCAN sensory profile might be complicated but try your best to make some meaningful generalizations.

Hearing Speech and Hearing Noise

What it means: Children with high sensitivity to auditory stimuli seem naturally tuned-in and over-responsive. Children with low sensitivity to auditory stimuli seem tuned-out and under-responsive. Hearing means sensitivity to any kind of auditory signal. Different parts of the brain process different types of sounds: tone, pitch, frequency, harmonics, etc. Here, for practical purposes, we will distinguish between just two general types of auditory stimuli; speech (words said) and noise (everything else). It is very common for some children to have a "mixed pattern"; that is, either high sensitivity to speech *and* low sensitivity to noise or high sensitivity to noise *and* low sensitivity to speech.

Also, in describing your child's sensory profile, we are just talking about registration (from ears to the back of the brain), not processing (which involves regions closer to the front of the brain). In other words, just because your child *hears it* does not mean that s/he *gets it*. For some children, the sound of others talking is only so much noise. We will move beyond simple registration of auditory stimuli to the more complicated processes of understanding in the skills section below; specifically, under language, musical and social abilities.

Every child should have regular hearing screening for hearing deficits.

Goodness of fit:

- *"Good for":* **High sensitivity to speech** is good for registering spoken communication; at home, with friends and in the classroom. Despite this Age of the Internet, human beings still communicate primarily by talking with each other. **High sensitivity to noise** is good for noticing important environmental cues. For example, heightened auditory registration may be life-saving if a car is coming just around the corner. It can be socially advantageous to notice tone of voice. An open channel for beautiful sounds in nature or music can bring pleasure. **Low sensitivity to speech or noise** can be good for filtering out conversations or other background "static" that could be distracting or irritating. Children with low auditory sensitivity might have an easier time focusing on preferred stimuli or tasks. It may be easier for them to stay relaxed and calm; for example, when falling asleep at night or concentrating on desk work at school.
- *"Problem if":* Conversely, **hypersensitivity to hearing speech or noise** can be a problem if it causes distractibility. Such children might have trouble filtering out background chatter or noise. Attention can be pulled away from more important

stimuli, activities or tasks. Some children may find that ordinary background noise can be quite irritating. **Low sensitivity to hearing speech** can be a problem when children are expected to register and respond to the spoken word. This difficulty is compounded if information is presented exclusively to the ears without accompanying visuals. **Low sensitivity to hearing noise** can have safety repercussions if auditory warning signals go unnoticed. These children are more likely to miss some non-verbal cues; such as tone of voice, inflection or throat-clearing; plus, other important auditory-social signals; such as, bells, bongs or whistles that mark the end of recess. Children with low auditory sensitivity might speak too loudly or make loud noises, unaware of how this is perceived by others.

- *"Parent-child fit":* Parents with high sensitivity to hearing may be good "noticers". On the other hand, they may feel annoyed by the normal sounds of children. Parents with low sensitivity to hearing may be poor "noticers" but more able to let potentially irritating chatter or noise float on by. When parents and children have very different thresholds for registering auditory stimuli, any conflicting tendencies to over-react or under-react might be mutually confusing, frustrating or irritating.

Accommodations:

- Strategies to accommodate **high auditory sensitivity** include directing preferred input toward your child's ears while keeping distracting input away. Especially if other sensory pathways are weak, parents can use a child's relatively strong speech registration channel to help these children compensate. For example, reading aloud or "talking books" can help registration of the printed word. Vocal repetition, paraphrasing and discussion can improve comprehension. Words can be set to music. The workspace should be designed with attention to the auditory environment. If auditory hypersensitivity is a source of distraction, then background noise should be kept to a minimum. Silence or at least soften others. Turn off or turn down the volume of other stimuli. Create a quiet space. Consider earplugs, headphones, white-noise machines or fans. Background music can be a source of distraction for some but an effective filter for others. See what works for your child. Adults can provide auditory forecasts: "It will probably be pretty noisy in there." Before entering loud environments, the child can linger outside and take time to gradually acclimate. Adults should understand that some of these children speak softly or avoid making noise because they are irritated by the very sounds they produce, not necessarily because they are shy.
- Strategies to accommodate **low auditory sensitivity** begin with understanding and accepting that your child is not deliberately tuning you out. Remember, hearing happens in the ears but listening and understanding happen in the brain. Working ears need receptive brains just like a movie projector needs a movie screen and a dark room. Many of these children are falsely accused of "selective" hearing. They may be chastised for not listening. But low sensitivity to hearing is not a matter of willful ignoring, disobedience or low intelligence.

    - Even when children with low sensitivity to auditory input are not deaf, we should think about interacting with them as if they are.[43] Do not call to these

[43] Marc Marschark , Educating Deaf Students: From Research to Practice

children from another room or across a noisy space. First, come over and be sure to get your child's full visual and/ or touch attention. Then keep it short and simple. Don't talk too fast. Although increasing your voice volume a bit might help, avoid shouting. Distractions should be kept to a minimum. In a classroom, these children should sit up front, close to the teacher and away from the hallway door. If a child has a one-sided or asymmetric hearing deficit, speakers should take care to position the "good ear" closer.

- Use a multi-media approach to communication rather than relying exclusively on the weak auditory channel. Don't just explain. Demonstrate. If a child is known to have other "input routes" that work well, use these to get and keep attention. Use touch and movement. Some children hear spoken language better when it is put to music. Above all, think about visual communication. Exaggerate your facial expressions, gestures and body language. Use visual aids such as, pictures, charts and clocks. Visual aids should change along with the content of speech. For example, when the topic changes those visual aids should be put away and new pertinent ones brought to the forefront. Sign Language is now commonly used outside of the Deaf community not as the sole means of communication but as a liberating and sensitizing supplement.
- Some children with low sensitivity to hearing require extra supervision and facilitation. For example, a relative lack of auditory awareness could create a serious street safety problem. To compensate for poor processing of auditory social cues, rely on visual strategies or touch. In advance, before the auditory environment becomes difficult to navigate, preview and rehearse social expectations.

Side notes: Mixed auditory sensitivity profiles are common and complicated. Some children are not just over- *or* under-sensitive to speech; they can be over- and under-sensitive to different *types* of voices; for example, low vs. high pitched. The same complexity pertains to different types of noises. For example, the same child can be over-sensitive to the sound of birds quietly chirping but impervious to the loud rumble of an old air conditioner. An infinite variety of mixed auditory sensitivities exists because different types of sounds are processed by different parts of the brain and different children grow up under diverse environmental conditions. All that being said, the most common problem with mixed auditory sensitivity seems to be the combination of high sensitivity to noise and low sensitivity to speech. This is especially challenging when environmental noise and speech registration demands are both high; for example, a nosiy classroom. The obvious solution, as discussed above: Turn down the background noise, turn up the foreground speech and use non-auditory supplementary aides. All of this customization depends on anticipating the situation and understanding your child's sensory profile.

Vision

What it means: Every child should have regular vision screening for vision deficits. Whether vision is normal or not, some children just seem especially alert to their visual environment. Other children seem relatively oblivious to visual signals.

> Vision is the most complex of the human senses. There are many different types of visual input. We have different nerves, brain regions, and networks for night vision and day vision; for central vision and peripheral vision; for shape, object, motion, depth, number, and color; for facial identification and expression; and more. In this sensory section of the QUICK SCAN, we will consider sensitivity to visual stimuli in general. In the skills section of the QUICK SCAN below, we will discuss more specific visual channels and networks pertaining to reading, spatial relations and social skills. As emphasized in the discussion of hearing - and true for all facets of the sensory system - awareness of a sensory signal is different than interpretation and understanding. Here, we mean simple registration (eyes to brain); not complicated processing (across many different brain regions).

"Goodness of fit"

- *"Good for":* **High visual sensitivity** is good for situations where visual registration is required. Visual responsiveness is often an advantage regarding learning, recreation and safety. These children may have enhanced appreciation of nature or art. **Low visual sensitivity** is good for filtering out visual distractions; for example, if the teacher is talking when there's lots going on out the window.
- *"Problem if":* **High visual sensitivity** can be a problem if the child is distracted from important tasks or signals. Some children have trouble listening because they are just so busy looking around. They look at one thing then another then another. Some children are so sensitive that they are irritated - even distressed - by ordinary light, patterns, or movement. **Low visual sensitivity** is a problem if these children miss information that is important for safety, learning, social interaction or pleasure; for example, red traffic lights, blackboard instruction and facial expressions. Sports that are intensely visual (such as baseball and soccer) may be more difficult than others that are less visually taxing (such as swimming and running).
- *"Parent-child fit":* When parent and child have similar patterns of visual sensitivity, they might both under-react or over-react; but at least, they tend to react in-sync. Parents may assume that their children see the world in much the same way. But this is not always the case. For visually mismatched adults and children, what's visually obvious, irritating or important to one might be missed, difficult or inconsequential to the other. These kinds of sensory system mismatches can lead to confusion or frustration; leading some parents or teachers to think or say, "What's your problem? It's right in front of your face!"

Accommodations:

- Strategies to accommodate **high sensitivity to visual stimuli** include elimination or minimization of visual distractions. The child can be seated with his or her back towards visual fields that are <u>too</u> interesting; such as, the window. Of course, TVs, computers and other electronic screens might have to be turned off or out of sight. Some rooms are too full of bright, colorful or moving objects. Visual aids can help capture and sustain the child's attention, but they must be directly relevant to the

subject at hand. Maps, graphs, pictures, diagrams, colors and demonstrations can all help. But off topic "visuals" should be put away so that they do not distract. If there is a tendency towards light sensitivity, use window shades, low lighting or sunglasses. Some children need to take visual breaks from prolonged reading or electronics to avoid eye strain.

- Strategies to accommodate **low sensitivity to visual stimuli** avoid exclusive reliance on visual input. Before communicating with these children, parents should insure engagement by using sound, touch or movement. In school, maps, graphs and pictures - designed to make information processing easier for others - may make things harder for these children. They may actually require more verbal explanation and less visual communication. Color-coding can be confusing if color insensitivity or true color blindness goes undiagnosed. Across the life span, if safety requires visual vigilance, extra supervision may be required. This is true for the young child stepping in front of a moving swing or the teenager learning to drive a car. Like looking into the sun, excessive TV or computer screen time can cause eye damage if a child is not "bothered enough" by extended staring into bright lights.

Side notes: Of course, visual acuity changes over time. That's why all children should have yearly vision screening. More complicated and more interesting, the interplay between visual and other sensory systems also changes over the course of the life span. To demonstrate the point, consider Stevie Wonder, Blind Lemon Jefferson, Jose Feliciano, The Blind Boys of Alabama, Ray Charles, Doc Watson, and George Shearing. All great musicians. All blind; either from birth or very early in life. Their extraordinary ears for music probably developed - at least in part - as compensation for their visual deficits. (Many musicians with normal vision close their eyes while playing or listening to enhance their musical experience.) Conversely, Deaf people learn to use Sign Language and lip-reading for communication; plus floor vibrations for music. This capacity for the human brain to "grow" compensatory sensory systems also occurs in degrees with lesser sensory impairment.

With shifting environmental demands, the need for accommodation of sensory difference can change over time. One of the brightest students in my medical school class failed his first histology (microscopic anatomy) exam. He knew his stuff. But, before medical school, his inability to distinguish between subtle shades of red and blue had never been so specifically tested. Given the incidence of color-blindness in the general population, our professor was accustomed to discovering 1-2 color-blind med students each year. For the next exams, my classmate was provided with written descriptions of cell color. He aced the rest of his histology exams and went on to a stellar career in primary care pediatrics – not Pathology!

Taste and Smell

What it means: On the tongue, there are four main types of taste receptors: sweet, sour, salty and bitter. From the nose to the brain, there are many specialized cells and nerve tracts for different odors. Some children have **high sensitivity to taste and smell**. Others have

low sensitivity to taste and smell. Children have a wide range of differences regarding how easily they notice these many types of sensory stimuli. Sensitivity to taste and smell often travel together.

"Goodness of fit"

- *"Good for":* **High sensitivity to taste and smell** can be good for noticing potential hazards. These children may be the first to report spoiled food, smoke or other hazards. They may be able to appreciate and enjoy certain foods and odors on a more discriminating "aesthetic" level.[44] There are even professional tasters and sniffers who must be so endowed. Children and adults with these hypersensitivities might be less likely to experiment with drugs of abuse; either inhaled (marijuana, cigarettes) or ingested (alcohol). On the other hand, **low sensitivity to taste and smell** can be can be good for olfactory and gustatory flexibility. These children may not be bothered by foods or smells that would turn others away. They may be more open to trying new and different foods. They might fit more comfortably into social situations that revolve around eating different foods. They have less difficulty with pungent environments or pungent people.
- *"Problem if":* **High sensitivity to taste and smell** can be a problem if the child will not accept a healthy diet or lacks the flexibility expected for social eating. Extreme sensitivity to certain smells can make ordinary environmental exposures excessively irritating, unsettling or even anxiety-provoking. Some children cannot stand even a whiff of perfume, autumn leaves, kitchen or body odors. These children might feel uncomfortable when their air is even a bit "impure". **Low sensitivity to taste and smell** can be a problem if children do not notice certain hazards. They may not avoid harmful or unhealthy foods. They may be oblivious to warning odors. Some of these children may seek or even crave unhealthy foods, "non-foods" or dangerous chemicals. They might be more likely to mouth, eat or inhale in an unhealthy and socially inappropriate manner. They may need to substitute safe alternatives to satisfy undesirable cravings.
- *"Parent-child fit":* Plusses and minuses here as everywhere. Parents with high sensitivity to taste and smell might be more attuned to warning signals or they might over-react and influence their children inappropriately. Parents with low sensitivity to taste and smell might either miss these sensory cues or better communicate tolerance of sensations to their children. Either way, if parent and child have significantly different sensory thresholds, this may lead to mutual misunderstanding, tension, and frustration.

Accommodations:

- Strategies to accommodate **high sensitivity to taste and smell** boil down (pun intended) to avoiding unnecessary exposure. Remember, your child's sensory experience may be very different than your own. Force-feeding is never a good idea. Very gradual exposure may be necessary. Unpleasant foods can be masked by hiding one food in another. But for many of these children, that simply doesn't work. To a degree, parents may have to accept a poorly balanced diet and view improved nutrition as a very long-term project. Odors that are noxious to these children can be

[44] Diane Ackerman, A Natural History of the Senses

countered by improving ventilation, spraying deodorizers or burning candles. If such exposures cannot be avoided, older children can be warned and taught socially acceptable ways of reacting.

- Strategies to accommodate **low sensitivity to taste and smell** involve increasing supervision and controlling the environment. Parents of these under-reactive children have to be more deliberate and regular in teaching rules of health, safety and society. This includes explicit and wide ranging instruction; for example, in nutrition, substance abuse and manners. High-salt and high-sugar diets should be discouraged. Parents should control the availability of such foods. Also, parents should be knowledgeable about inhaled or snorted drugs; not just cigarettes, marijuana and cocaine; but glue, household products, white-out and others.[45] All early adolescents should be warned that infectious diseases can be transmitted by oral sex.

Side notes: About that last sex comment. For some readers, the connection just made between taste, smell and sexuality might have been unexpected and uncomfortable. But the connection is real and some more general points are worth further discussion.

In addition to taste and smell, almost all sensory systems are involved in sex. Sex is affected by over or undersensivity to light touch, deep touch, hearing, vision, spatial position and internal physical signals. Sexual development also depends upon individual differences in behavioral style; including, motor activity level, impulsivity, attention, initial reaction, adaptability, intensity of reaction, mood and regularity. Furthermore, there are complicated connections between sexuality and the whole range of skill strengths and weaknesses; including, fine motor, gross motor, expressive and receptive language, spatial relations, visual arts, music, math, time awareness, planning, organization, implementation and social skills. And last but not least, sexuality is profoundly effected of environmental, physical and life stresses.

I have elaborated upon this connection between taste, smell and sex, to make some more general points. First, there is not a single aspect of individual difference that might not be relevant to human development throughout the life span. Some of these connections are just more hidden or surprising than others. Second, no one aspect of developmental difference ever wholly explains variations in individual or interpersonal function. Rather, it's the complex combination of developmental differences that underlies all human behavior. Third, goodness of fit should be considered, not just by parents of children with challenging behavior; nor just by adolescent and adult couples regarding the potential interplay of their sensory-sexual differences; but across all human relationships and activities. These individual differences are sometimes hidden but they are always intertwined and fascinating. Understanding how all these factors affect you and your child can be empowering and liberating.

Light touch and deep touch

[45] AAP, Growing Up Drug-Free, https://www.dea.gov/pr/multimedia-library/publications/growing-up-drug-free.pdf

What it means: From the hair on your head to the nails on your toes, there are many different types of touch receptors which send different electrical signals along different nerve pathways to different regions in the brain. We have specialized networks for a range of touch stimuli: vibration, indentation and movement; velocity and duration; heat, cold and rate of temperature change. There are different kinds of nerve systems for different kinds of pain; plus different kinds of movement in joints, muscles and tendons. To simplify discussion and focus on sensory differences that are most relevant to understanding challenging behavior, the QUICK SCAN is artificially limited to just light touch and deep touch.

As for other facets of the QUICK SCAN, most children have a "mixed pattern" of sensory preferences. They can be oversensitive to some types of touch and under sensitive to others. It is not unusual to be undersensitive to deep touch while being oversensitive to light touch. Children with this pattern of tactile incongruity love big hugs, cuddling and intense physical contact but they hate caresses, tickles and certain types of clothing. It is also common to have just the opposite sensory mix; that is, high sensitivity to deep pressure ("Don't hug me!") coexisting with low sensitivity to light touch ("Tickle me! Tickle me!").

Goodness of fit: What's good for low sensitivity to light and deep touch is a problem if an individual has high sensitivity to the same stimuli. And what's a problem if your child has low sensitivity to light and deep touch is good for someone else with high sensitivities.

- *"Good for":* **Low sensitivity to light touch** is good for tolerating minor skin discomfort and different textures. These children have an easy time with clothing, shirt collars and tags; shoes and socks; bathing, haircuts and hair brushing; bandaids, and lotions. If these children are accidentally brushed up against, it's not a big deal. **Low sensitivity to deep touch** is good for fun, comfort, and interpersonal physicality. These children love big hugs and prolonged cuddling. They do not mind hard knocks on the athletic field, the playground or the playroom. If the desire for deep touch is shared and safe, some rough-housing can be fun and socially connecting.
- *"Problem if":* **Low sensitivity to light touch** can be a problem if the child is slow to notice danger. The relative absence of certain withdrawal reflexes can result in failure to protect against burn, frostbite, or some types of unwanted or inappropriate physical contact. Having **low sensitivity to deep touch** can result in unhealthy or socially problematic cravings. For example, some children can be too physical, too aggressive or too interested in seeking out socially unacceptable touching.
- *"Parent-child fit":* Individual sensitivities to touch may or may not fit well with social expectations, daily routines or other sensory preferences. Parents with high sensitivity to certain types of touch may not be comfortable with children who have the opposite craving. Parents with low sensitivity to touch may be frustrated, confused or upset when their children seem bothered by certain types of physical contact. If the desire for certain types of touch is not shared, this can contribute to interpersonal problems across peer and sibling relations as well. Again, it can be uncomfortable but important for parents to consider the sexual implications of these variations.

Accommodations:

- Strategies to accommodate ***low sensitivity to light touch and deep touch*** may require extra preview, more explicit rules and tighter supervision. These children need careful instruction about how to recognize and avoid various dangers. They need well-defined and clearly communicated social norms. For example, using dolls or drawings, parents can show how rules for touching change depending on social context. Green zones (ok to touch), red zones (not ok to touch) and yellow zones (maybe ok to touch) change according to setting (public vs. private, classroom vs. playground), context (dancing, greeting, sports) and person (parent, sibling, close friend, acquaintance, teacher, sexual partner).
- As with all other hypersensitivities, strategies to accommodate **high sensitivity to light and deep touch,** begin with understanding and acceptance. If easy and inconsequential, parents can eliminate or at least minimize exposure to irritating tactile stimuli. For example, parents can respect their child's preferences in clothing texture. They can minimize baths and even modify hugs. And so on. After all, we adults make these kinds of choices for ourselves all the time.

Side notes: At this point, a disclaimer seems warranted. As stated earlier, we have limited our discussion so far to accommodations; not interventions. Readers might be growing impatient. Isn't there a limit to how much we should cater to our children's developmental differences? How are they going to learn navigating the real world? Doesn't avoidance reinforce hypersensitivities? Every time we accommodate our challenging children, don't we deny them an opportunity to develop flexibility, learn new skills and work things out on their own? Is the approach advocated here tantamount to permissive parenting? When do we stop spoiling, coddling and enabling? How about setting some limits? How about letting them learn that the world doesn't revolve around their personal preferences? In the context of this section on sensory differences, what about the child who refuses to get dressed and has a tantrum every morning because, "This shirt is too scratchy!" The harder these parents try to find "the right shirt", the more this child insists, "There aren't any shirts that feel right!! I can't go to school!".

For this hypersensitive child – and for yours - YES, the bulk of the *Parent Child Journey* will be devoted to desensitization, limit setting, natural consequences and a host of other behavioral interventions that promote self-care, flexibility and independence. By the end of this Journey, across a variety of challenging situations, you will have determined the right balance of accommodation *and* intervention; acceptance *and* intervention.

Movement/Body Position in Space

What it means: The inner ear sends signals to the brain about balance and position, movement and acceleration. Children with **high sensitivity to movement and positional change**, experience distress or, more often, avoid such activities altogether. Other children with **low sensitivity to movement and positional change** are not bothered by even sudden or extreme positional changes. They may seek out spatial orientation adventure.

"Goodness of fit"

- *"Good for":* **High sensitivity to movement** can be good for avoiding potentially dangerous activities. Such children are more likely to opt out of truly risky jumps, slides, and high speed misadventures. They might naturally resist ill-advised dares from peers. They are more likely to exercise caution on skates, bikes, hikes and playgrounds. **Low sensitivity to movement** is good for having certain kinds of fun or tolerating unavoidable acceleration or turbulence. So much childhood fun depends upon a love of hurtling through space. A wide variety of sports and recreational activities require a high tolerance of positional change in space; for example, gymnastics, boating, skiing, skating and amusement park rides. Many good times and friendships are launched and shared on swing sets, slides, rides, hills and diving boards. Traveling by car, bus, train, or plane can be a true pleasure for these children and their parents.
- *"Problem if":* A **high sensitivity to movement** and positional change can be a problem for many desirable or necessary activities. These children are not born for space travel. They can have significant discomfort with very ordinary car rides, slides and swings. Even walking down stairs and hills can feel like torture. Anxiety and nausea are no fun. Adults who don't understand the source of secondary behavioral disturbances might feel frustrated. **Low sensitivity to movement** can be a problem if children engage in dare devil behaviors and put themselves at risk of serious injury.
- *"Parent-child fit":* Parents with high sensitivity to movement might find themselves mismatched with a movement-craving child. Parents with low sensitivity to movement might have difficulty understanding their child's reluctance to travel or participate in certain activities.

Accommodations:

- Strategies to accommodate **high sensitivity to movement** involve avoiding or at least minimizing unwanted changes in position and velocity. These children should not be forced into distressing activities just because it's somebody else's idea of fun. For unavoidable travel, parents and children should experiment with different strategies; such as, distraction with music or conversation; relaxation with breathing awareness, muscle exercises or positive mental imagery; or preferential seating (if safe) in the front seat. Car drivers should take it easy; avoiding sudden braking, accelerating and turning.
- Strategies to accommodate **low sensitivity to movement** require extra supervision in high-risk environments. As they grow up, these movement-seeking children need to be carefully watched and taught; beginning with stairs, then playgrounds, streets and "extreme" recreational activities. Appropriate safety equipment should not be shunned. Rules should be reviewed and enforced. Dance, skating, gymnastics and other relatively safe outlets should be provided for immediate pleasure and long-term health.

Side notes: What's the difference between high sensory reactivity and anxiety? These two aspects of a child's profile often "travel" together. In the context of this discussion, it may be difficult to know which came first; a child's fear of flying and driving or a sensitivity to movement through space. How to know for sure? In chicken-egg relationships, things change over time. A child with sensory reactivity might get more and more tense about airplanes and cars. Although this aversion may have started with motion-sickness, the secondary anxiety can "take on a life of its own". Even as the child gradually "outgrows" his or her sensitivity

to motion, the anxiety may continue. Just as possible, a child with a primary anxiety problem could easily develop secondary sensitivity to changes in spatial position. In theory, treatment might depend upon which came first; the sensory reactivity or the anxiety. Accordingly, interventions would target either the "sensory brain" or the "emotional brain". Thinking practically, if a child is impaired by coexisting motion sensitivity and anxiety, should parents call an occupational therapist who specializes in sensory strategies or a psychotherapist who specializes in therapy for anxiety?

The approach recommended steers clear of such artificial "either-or" approaches. Clearly, in this and most cases like it, there are sensory components to the anxiety *and* anxiety components to the sensory experience. Anxious children tend to have heightened sensory reactivity and hypersensitive children tend to experience more anxiety. As Mel Levine would say, "There is dysfunction at the junction of the functions". So, should this child see a psychotherapist *and* an occupational therapist? No. Better to see someone who *integrates* research and wisdom across disciplines; a therapist who truly sees the whole child; not one who treats coexisting facets as if they were isolated and unrelated. In this case, that means finding a psychologist who knows a lot about sensory differences *or* an occupational therapist who knows a lot about cognitive-behavioral therapy. Unfortunately, the paucity of cross-disciplinary training makes integrationists scarce and hard to find.

Beyond the chicken-egg question, should this child's inter-related motion-sickness/ anxiety be accommodated or fixed? Quite simply, both. The complicated part is determining the right balance of accommodation vs. intervention. Such management decisions cannot be found in consensus statements written by isolated therapeutic camps. Rather, the right blend of accommodation *and* intervention - in this example, sensory therapy *and* cognitive-behavioral therapy - is determined on a case by case basis then modified according to regular reassessment over time. How to do this? A comprehensive, integrated, multi-dimensional program. Not simple, but I hope that this *Parent Child Journey* proves to be a useful start.

Internal Body Awareness/Physical Symptoms

What it means: Some children have **high sensitivity to internal body sensations.** They are remarkably aware of physical symptoms. Infantile colic may be the earliest manifestation of hypersensitivity to intestinal discomfort. Over the years, children with this kind of body-awareness are quicker to notice fatigue, fever, headaches, stomachaches and other bowel and bladder signals. The list of potential sources of physical discomfort encompasses the whole range of Pediatric Medicine.[46] Children with **low sensitivity to internal body sensations** do not readily notice these internal stimuli. They are relatively oblivious to body signals.

"Goodness of fit"

- "*Good for":* **High sensitivity to internal body sensations** is good for getting sympathy and any necessary medical attention. It helps with toilet training and self-care. **Low sensitivity to internal body sensations** is good for tolerating minor discomforts and carrying on despite illness.

[46] Barton Schmitt, Your Child's Health

- *"Problem if":* **High sensitivity to internal body sensations** is a problem if it interferes with normal functioning. Some children run to the bathroom more than they need to. Others can be "bellyachers" or "somaticizers"; that is, true hypochondriacs. They overreact to normal physiologic changes or experience any degree of emotional distress as physical symptoms. In addition to the child's amplified misery, their distorted reporting can cause diagnostic confusion and frustration for others. **Low sensitivity to internal body sensations** is a problem if significant medical problems go unnoticed and under-reported. Some of these children might rupture an ear drum or an appendix before anybody knows they've been sick. Sometimes, relative insensitivity to bowel and bladder signals can interfere with toilet-training or timely toilet use. For safety and optimal care, some chronic medical conditions - such as asthma and diabetes - require a certain level of body signal awareness.
- *"Parent-child fit":* Parents who have a high sensitivity to body discomforts may project this heightened awareness onto their children. This can cause parents to over-react to their child's symptoms, model poor coping or make the child unnecessarily anxious. Parents who are distracted by - or obsessed with - their own physical discomforts might be less emotionally available to their children. On the other hand, parents who have a low sensitivity to body discomforts may find it difficult to empathize with a child who seems to be a "bellyacher" or "always calling wolf".

Accommodations:

- Strategies to accommodate **high sensitivity to internal body sensations** involve minimizing physical distress whenever possible. For example, if a child is more sensitive to pain or fever, parents may be somewhat more liberal with medications. As these hypersensitive children get older, it may be appropriate to allow brief and infrequent breaks from certain activities - "until you feel better" - as long as they do return and a tendency to withdraw does not spiral out of control. With children who are unreliable over-reporters, parents and doctors may need to rely more often on objective data from physical exam, laboratory tests or radiologic imaging. Adults can avoid over-reacting or under-reacting to the child's "drama" by carefully monitoring trends then distinguishing between symptoms that are mild and transient versus serious and persistent. When in doubt, parents should contact their pediatrician.
- Strategies to accommodate **low sensitivity to internal body sensations** require parents and other caregivers to have a "high index of suspicion". These under-reporting children can put themselves at increased risk. Parents can learn their child's subtle cues. For example, for some young children, vague and minor changes in behavior or sleep pattern might be reliable indicators of ear infection. The increased risk off undetected illness should condition parents toward going to the doctor for relatively mild symptoms. For children with chronic or recurrent medical conditions, parents might have to rely more often on objective physiologic measures; such as, peak flow meters if asthmatic and thermometers if immunocompromised.

Side notes: In describing your child's sensitivity to body sensations - or any other facet of their behavioral style - remember that these are just generalizations about predispositions and tendencies; not 100% reliable indicators or predictors. Parents and doctors who know a child too well should

not let history bias their judgment too much. For under-reporters, there might be a tendency to over-compensate with excessive assessment and unnecessary treatment. On the other hand, each time a chronic belly-acher's symptoms are too quickly dismissed – "there he goes again" – it could be the one time that s/he has a serious medical or surgical problem. Furthermore, even if the physical symptoms are "all in their head", emotional distress is no less deserving of attention, evaluation and support; albeit, of a different kind. After all, the distinction between "mind" and "body" is never so clear and clean. We all experience physical symptoms in different ways. Our perceptions depend not just upon our temperament and physiology; but also, our culture, experience and conditioned behavior. As a result, these sensitivities change over time.

This concludes our discussion of behavioral style including temperament and sensory profile. We now turn to a discussion of various skills.

Skills

In this section of the QUICK SCAN, you will rate your child's relative strengths and weaknesses in the following developmental domains:

- Fine Motor
- Handwriting
- Gross Motor
- Speaking
- Listening
- Writing
- Reading
- Understanding Spatial Relations
- Visual Arts
- Music
- Math
- Time Awareness
- Planning, Organization, and Implementation
- Social Skills

We all have strengths and weaknesses. Your child's "skills profile" represents a combination of affinity, opportunity, instruction and practice. Understanding your child's skills profile will further help explain the source of your child's challenging behavior. Furthermore, this description of skills will guide individualized and effective management strategies. Most important, the skills profile represents a road map to success and fulfilment.

These skill categories are artificial. Each facet of your child's skills profile exists in dynamic interplay with every other facet; that is, language and math effect each other, fine motor and time management effect each other, gross motor and social skills effect each other, and so on.

As emphasized elsewhere, all developmental domains are intertwined. These important interconnections are sometimes obvious; other times, hidden. Many skills that are considered prerequisites for academic success are at least as important for social-emotional functioning. For example, strengths or weaknesses in expressive language are important both in the classroom and on the playground. Conversely, social skills are necessary both for making friends and for group academic learning. Furthermore, all other facets of your child's profile – including behavioral style, sensory profile, and life stresses - effect each facet of the skills profile; and visa-versa. Often, mild weaknesses in several different areas are of no consequence when viewed in isolation. However, in combination, minor differences can cause surprisingly significant impairment. Take the child who has just a little trouble with attention, a little trouble with receptive language, a little trouble with time management, and little trouble with writing efficiency. It might not be immediately obvious why he never knows what to do for homework. Each weakness by itself is no big deal. However, if parents and teachers take a step back and view the overlap of these subtle differences, there is no mystery at all. In fact, this broader perspective makes the source of difficulty painfully clear. Skill by skill, we will be considering many of these important interconnections.

As with all facets of the QUICK SCAN, your child's skills profile will change over time. Some children overcome or "outgrow" disability. Other children experience progressively increasing impairment. For all children, we should do our best to accommodate and remediate skill deficits. In addition - and perhaps more importantly – we should make every effort to identify and nurture each child's natural strengths and interests. A strengths-based approach to skills development provides a crucial foundation for success, social connection and positive self-image.

This does not mean that every child has some hidden talent or genius. We have all heard incredible stories about amputees climbing Mount Everest or Autistic savants quickly mastering complicated foreign languages. Although such tales are inspiring, some people in the Disability Rights Movement sardonically call them "Super-Crips" because their heroism can also be demoralizing. After all, such compensatory abilities are truly extraordinary. Not every blind person can be Stevie Wonder. Not every child with Language Disability can be Albert Einstein. And not every child with a Mood Disorder can be Abraham Lincoln. For most people, there is a limit to how much can be achieved. To suggest that anyone can overcome their disability if they just try hard enough is unrealistic and insulting. Still, as emphasized by Howard Gardner in his writings on Multiple Intelligences, there are "different kinds of smart".[47] To a certain degree, areas of relative ability can be tapped to facilitate progress in areas of relative weakness. And these strengths can be strengthened for their own sake. Just because a child has difficulty in some areas of development does not mean that they must be denied any measure of success.

[47] Howard Gardner, Different Kinds of Smart

As you complete your child's skills profile, describe his or her current level of functioning. Do not dwell on the past or speculate about the future. Let's not place any artificial ceiling on his or her developmental potential or assume a certain life path. And do not define your child's destiny by just one narrow facet of his or her profile. Rather, the current skills profile should simply take the mystery out of every day struggles and guide effective solutions. If we take care of today, who knows what tomorrow will bring?

Similar to the explanation of behavioral style and sensory profile, for each facet of your child's QUICK SCAN skills profile, I will offer comments regarding:

- "What it means" including developmental norms
- "Goodness of fit"
    - "Good for/ "Problem if"
    - "Parent-child fit"
- Accommodations
- Strengthening strengths
- Side notes

Fine motor, handwriting, and gross motor

What it means: For some children, motor performance comes easily. Others have difficulty with motor control; due to lack of practice, lack of natural ability or both. For the first few years of life, we have very well established norms for motor development.[48] Average ages for achieving early motor milestones can be found in any standard textbook.[49, 50]

Gross motor milestones

prone

- head up 1 month
- chest up 2 months
- upon elbows 3 months
- up on hands 4 months

roll front to back	3 to 4 months
roll back to front	4 to 5 months
sit with support	5 months
sit without support	6 to 7 months
come to sit	8 months
crawl (quadruped)	8 months
pull to stand	8 to 9 months
crawl	9 to 10 months

[48] Frankenburg, Denver Developmental Screening Test (DDST II)
[49] Nelson, Textbook for Pediatrics
[50] Illingworth, S.R., The Development Of the Infant and Young Child: Normal and Abnormal

walk (two hands held)	10 months
walk (one handheld)	11 months
walk alone (10 steps)	12 months
stoop and recover	14 months
run (stiff leg)	15 months
walk upstairs (with rail)	21 months
jump in place	24 months
pedal a tricycle	30 months
downstairs (alternating feet)	3 years
balance (5 secs each foot)	4 years

Fine motor milestones

retain ring (rattle)	1 month
hands unfisted (< 50%)	3 months
reach	3 to 4 months
hands to midline	3 to 4 months
transfer hand-to-hand	5 months
take one-inch cube	5 to 6 months
take pellet	6 to 7 months
immature pincer (thumb-finger)	7 to 8 months
mature pincer	10 months
voluntary release	12 months
tower of 4 cubes	18 months
tower of 8 cubes	2.5 years

Graphomotor milestones

scribble	13 months
copy vertical line	2.5 years
copy circle	3.5 years
copy + sign	4.5 years
copy square	5.5 years

Current motor skills

Once your child has these basic motor skills down, assessment of higher level motor function becomes more qualitative and subjective. With increasing age, judgements about relative motor strengths and weaknesses are more about "how well" rather than "can or can't". Across the range of motor skills, how coordinated, fluid and efficient is your child? Clumsy or graceful? Accident-prone or "cat-like"? What about your child's muscle tone, posture and strength? Stamina and endurance? Ability to learn new movements and work towards mastery of more complicated and specialized motor skills? Without clear-cut norms for higher-level motor skills, we are left making rough comparisons with age-matched peers and speculating whether even subtle differences in motor ability might interfere skill acquisition. Think about the quality of your child's motor skills with regard to the following:

- *Gross motor skills*: walking, running, bike-riding, skating, sports
- *Fine motor skills*: grasping or manipulating small objects, taking, transferring and releasing; using fingers or utensils to eat, tying shoes, brushing teeth, dressing, buttoning clothes, or zipping; drawing, keyboarding, playing musical instruments, using tools
- *Graphomotor skills*: printing, cursive

"Goodness of fit"

- *"Good for"/ "Problem if":* Good motor skills are crucial for many types of tasks; including self-care, academics and play. Sometimes, motor weaknesses are obviously disabling. Other times, their impact can be subtler but still significant. Ultimately, motor difficulties don't just complicate the performance of specific tasks. Motor struggles can also have a negative impact on self-image, motivation and socialization.

    - Gross motor skills are important for sports, playground activities, peer interaction, exercise, health and ordinary transitions from place to place. At school, motor competence is most obvious in physical education class but it may be just as important for simply moving around the classroom, up and down stairs and through the halls. At home and play, children with motor weaknesses might have a hard time keeping up.
    - Fine motor skills are important across a wide range of life skills. For self-care; such as dressing, tying shoes, and eating. For play; such as building and games. For crafts; such as cutting, sewing, and folding. And for academics; such as keyboarding and managing a notebook.
    - Graphomotor skills are important for written expression, school performance, time management and organization.

- *"Parent-child fit":* When parents and children have mismatched motor skills, they may find it difficult to help each other with certain tasks or enjoy the same activities. What's easy for one can be difficult for the other. This can lead to misunderstanding, frustration and anger. On the other hand, when parent and child have the same pattern of motor strengths and weaknesses, it may be easier to sympathize, share and enjoy. Goodness of fit can be an issue across all kinds of motor activities; at home, school and with friends.

Accommodations:

Simply recognizing weak motor skills allows parents and teachers to respond empathetically and lessen the child's frustration. Parents and other adults should not push a child to "Just try harder!" They should not admonish: "You can do better than that!" Instead, empathize: "That sure is hard, isn't it?" An understanding response is deeply appreciated by children, whether their frustration is with motor performance in sports, crafts, writing or self-help.

If motor difficulties impair learning, socialization, self-help or health, then it may be necessary to provide special instruction, accommodations and support. Parents should consider allowing their child to opt out only if a difficult motor activity is frustrating and unimportant.

Children should not be forced to do things just because they are *supposed* to be fun. Many adults have preconceptions about what makes for a happy and meaningful childhood. Some parents, and our culture at large, attach undue value to success in competitive athletics. Certain activities that are fun for many children can be pure torture for a child with motor impairments. If the activity is supposed to be pleasurable but it only brings pain, then parents should re-examine their motivation.

In public settings, bypass strategies can be employed to lessen handicaps and avoid humiliation. Bypass strategies usually required modification of the task itself. Adults should ask: What is the educational or developmental bottom-line? Why does this task need to be done? Why is total avoidance inappropriate? What does the child really need to do? The answers to these questions will guide management. Usually, there are different roads that can lead to the same goal. Why jump over a hurdle when you can remove it or just run around it? Ideally, task modification is done in such a way that the child can successfully participate and enjoy without calling undue attention to their disability. Universal accommodations, such as ramps for wheel chairs, can destigmatize disability and make the climb easier for all. Whenever possible, modifications should be normalizing, not humiliating; empowering, not demoralizing.

Here are some examples of accommodation strategies for a variety of motor tasks.

For fine motor problems:

- Loafers or Velcro can substitute for tie shoes. Here, the goal is independence getting shoes on and off; not shoe tying per se.
- Electronic toothbrushes and short haircuts can make personal hygiene less physically demanding.
- Finger paints, touch screen or drawing software can facilitate artistic creation without requiring "a fine hand". Instead of free-hand drawing, children can use rulers, stencils, tracing paper, lined paper, and graph paper when it might otherwise be too difficult to connect points or reproduce images. Digital cameras can come in handy too.
- Simplified guitar or ukulele chords (on just 2 strings) or electronic pianos (that create full band sounds by just touching one key) can help children enjoy music without having to master finger technique. Some instruments such as sax, clarinet and violin are less forgiving of poor motor coordination than others such as piano, trumpet, autoharp, drums and harmonica. The pace of instruction and complexity of material should be slowed and simplified to match the child's rate of skill acquisition.
- For lack of a better place to comment on (non-speech) oral-motor control problems: Children (or adults) who cannot swallow whole pills or capsules can take crushed, sprinkled or liquid medicines. Some medicines come in dissolvable tabs that melt in the mouth or even patches that get absorbed through the skin.

For writing mechanics problems:

- Children with problems writing should not be forced to write on the blackboard in front of others. They should not be pushed to write faster than they really can.
- When poor handwriting interferes with self- expression, demonstration of knowledge or recording important information, consider the following bypass-strategies:

    - key-boarding
    - dictation to a scribe or voice recognition software
    - note-takers, recording devices, teacher notes, and teacher web sites
    - word prediction software
    - reduced written workload
    - oral, dramatic or other modes of presentation
    - power point
    - grading on content, not penmanship
    - extended time
    - write in test booklets instead of on separate "fill in the bubble" sheets
- Teachers can use a team approach for writing assignments and assign jobs such that each child's strengths compensate for another child's weaknesses. For example, one child is the reader, another is the idea kid, another takes care of supplies, another is the illustrator, another the scribe, and another is the project manager.

For gross motor problems:

- Toilet step-stools
- Sports accommodations:
    - For baseball, extra-fat baseball bats, hitting-Ts, Velcro gloves and balls
    - For basketball, low hoops and small light-weight balls
    - For soccer, playing goalie, assistant goalie, or defense instead of midfield or forward
- Non-competitive exercise: dance, water play, swimming, gardening, hiking, kayaking, martial arts, playground, camping skills, climbing, wrestling, yoga
- Stationary bike (in front of TV or movie if necessary; or while reading, looking at magazines, listening to music or audio books if possible)
- If your child likes sports but has gross motor difficulties, consider alternative modes of participation; such as, team trainer, manager, scorekeeper, statistician, photographer
- If the goal is getting from here to there rather than physical fitness, then provide ramps, rides, and lifts

Strengthen strengths: For children with an affinity for motor activities, parents should provide plenty of opportunity for fun, health, social connection, positive self-image and possible mastery. For fine motor and gross motor, the range of possibilities is wide and deep: sports and fitness, dance, arts and crafts, outdoor recreation and yard work, and on and on.

Side notes: Even minor lags in gross motor, fine motor, or writing skill can have a major impact. Early in life, subtle differences may not be obvious. The child might appear to be well within normal limits for acquisition of early milestones but only because it is impossible to assess later developing skills until they are due to come on line. For example, there is no way to know about a two-month-old's walking skills, a one-year-old's ability to tie shoe laces, or a two-year-old's cursive writing. Time must pass. Furthermore, as motor demands increase over the years, inconsequential weaknesses might become significant sources of impairment

and frustration. Only when expectations regarding work load and quality go up, difficulties with efficiency and endurance are exposed. Standardized measures and competition amplify the importance of seemingly minor skill deficits. Even as your child makes progress, other children make progress too. The performance gap can widen when your child's rate of development is help up against his or her peers.

On the other hand, some very obvious and worrisome motor delays might turn out to be surprisingly inconsequential. Some children do just fine despite their awkward way of running, fingering the guitar fret board, or holding a pencil. On standardized assessments they might score low but, in life, they do plenty well enough. They might learn to compensate for a motor disability by leaning on other offsetting strengths. They might be extremely late bloomers. Through special support, expert instruction and perseverance, they might overcome physical handicaps.

Accurate developmental assessment must take place over time. One point on a graph of motor abilities may fall well below average. But we must draw lines between many points to see meaningful trends. Relative to most other children, is your child's motor skills gap widening, closing, or staying the same? Also consider: Do these data points reflect real world functioning or just isolated skills? Long-term natural-environment assessment is crucial; not just in understanding motor development but in all other facets of your child's skills profile as well.

Language: speaking, listening, writing, and reading

What it means: Here, we will focus mostly on verbal language; that is, the development and use of words. Non-verbal language - including facial expression, tone of voice, gesture, etc. - will be covered below in the section on social skills. For the sake of simplicity, verbal language skills can be categorized as expressive or receptive; spoken or written; that is, speaking, listening, writing, and reading. As with other skills, your child's language development can be compared to the majority of typically developing children. Has your child achieved the following language milestones at these average ages? Earlier or later?

For speech:

- imitates speech sounds 5 months
- combines syllables 6 months
- first words 10 months
- combines words, 2-3 word phrases 18 months
- names one picture 18 months
- 50% understood by strangers 18 months
- Entirely understood by strangers 3 years

What about your child's quality, fluency and comfort with higher level speech skills; such as, putting increasingly complicated thoughts into words, organizing language on demand and enjoying conversation?

For writing, how does your child do putting his or her thoughts onto paper? Organizing thoughts into good sentences and paragraphs? Does your child enjoy writing?

For listening, when did your child achieve his or her milestones relative to these average ages?

- Points to 6 different body parts when asked, "Where's your____" 18 months
- Points to 4 pictures, when asked "Where's the _____" 20 months
- Understands 4 prepositions, 4 actions (verbs) and 3 adjectives 3 years
- Defines 7 words and give two opposites 4.5 years

For higher level listening skills, how does your child do…

- Understanding spoken communication?
- Learning the alphabet, days of the week months of the year, phone number, address, and birthday?
- Following a spoken story or lesson?
- Understanding directions without needing repetition?

For reading, how does your child do with…

- letter recognition?
- word recognition?
- speed and fluency naming (letters, number, and words)?
- following a line of print without losing place?
- reading for a long time?
- understanding written instructions?
- overall reading comprehension?
- overall pleasure reading?

For now, these guidelines are designed to keep things simple. In the side notes below, I will discuss some complexities of language assessment.

"Goodness of fit"

- *"Good for"/ "Problem if":* Language skills are important for school success. Children are tested and graded on their ability to read, write, and participate in classroom discussions. These academic performance skills may also be crucial for many future jobs. Although language strengths and weaknesses are systematically measured and reported against academic benchmarks, the very same expressive and receptive language skills can also have relatively hidden but profound impact outside of the classroom.

  Across all settings, language disorders often interfere with learning, problem-solving, social communication, behavior and even mood regulation. Virtually every aspect of human functioning depends on language. For many children, even subtle weaknesses in language comprehension can present as "oppositional" behavior or "selective hearing". These children may have relative difficulty understanding exactly what parents or teachers are saying. They may have problems asking for clarification. They may struggle to put their frustrations into words. Especially when stressed or anxious,

they may freeze, act out or explode. If a child cannot easily describe their own emotions, it's awfully hard to problem-solve. Instead of recognizing and accommodating these underlying language deficits, adults may assume that such secondary "non-complaint" behaviors represent willful "disobedience", "laziness", or "stupidity". Moreover, your child might not understand the connection between their own language weaknesses and their trouble performing up to expectations.

Beyond academic and behavioral issues, children with weak expressive and receptive language skills usually struggle in peer interaction. So much of social success depends upon fluent speaking and listening skills. Imagine trying to make friends and keep friends if you were suddenly dropped off in a foreign country.[51] For children with language weaknesses, navigating complicated and fast-paced verbal back and forth can be that daunting.

- *"Parent-child fit":* When parents and children share strong verbal language abilities, it can be easier to communicate expectations. When conflicts arise, language-able dyads have an easier time problem-solving together. If a parent or child has weak expressive or receptive language, it's harder to understand and help each other. This can lead to misunderstanding and anger. Parent and/ or child might unwittingly communicate their frustration rather than repair what was "lost in translation".

***Accommodations*:** Strategies to accommodate language skills deficits require adults to remain attuned to possible academic, behavioral, and social repercussions. Parents and teachers need to understand the child's language level and adjust their verbal communication accordingly. The child's language developmental age might not match their chronological age. Expectations must match abilities. Parents and teachers need to remember that these children talk, understand, read and write at "younger" levels. At the same time, it is important not to confuse language abilities with intelligence. Even children with severe language disability can learn. Adults just need to stay calm, patient and sensitive to the frustration these children experience. Parents and teachers should take care not to embarrass or humiliate. They should be sure not to mistake language disability for defiance, anxiety or global delays. They should not mistake paucity of expression for disinterest, rudeness or inability to learn.

In general:

- Find the mode of language processing and production that is easiest for your child and let him or her rely on that input and output channel; such as, listening versus reading, speaking versus writing.
- Supplement verbal communication with non-verbal modes; for example, demonstration, not just pure explanation.
- If language efficiency interferes with the child's ability to demonstrate knowledge, consider reduced workload and extra time for tests and assignments. Warning: Extra-time is often very helpful - but not always. If a child just doesn't know what they are reading or how to begin formulating a response, all the time in the world will not vanquish a true learning disability. In fact, extra time might even lead to extra

[51] Nowicki and Duke, Teaching Your Child the Language of Social Success

frustration. The longer a child just sits and stares at a blank piece of paper or struggles to speak, the more anxious s/he may become. Extra time may be necessary but not sufficient.

- In school, foreign language requirements can be modified or even waived if a child is bound to have difficulty with just their native language.

For Speech problems:

- Make sure that more verbal children do not always jump in and take away speaking opportunities from a less fluent child.
- If a verbal response is necessary, extra processing and production time can help. Let the child know the question in advance. Give assistance preparing an answer. Do not call on these children in class or in certain social settings if the result would only be embarrassment.
- Sign Language[52], Picture Exchange[53] and symbol selection can empower speech delayed children to communicate. A plethora of new technologies "speak for the child" when s/he touches various pictures on customized electronic app screens.[54]
- Multiple choice or true-false formats can help; both in casual conversation and class discussion.
- "Comic strip conversations"[55] can help children slow down and express emotionally complicated thoughts. Using sequential panels, just like a cartoon strip, draw simple figures then have the child suggest how to fill in thought or feeling bubbles. "What is he thinking now?"

For written expression problems:

- Again, extra time, adjusted work load *and* extra help can be crucial.
- Avoid total reliance on weak writing skills. These children should be allowed and encouraged to share their thoughts and feelings by other means; drawing, acting, demonstrating, singing, speaking, dictating – whatever alternate mode of presentation takes advantage of the child's strengths to bypass their written output weakness.
- Use multiple choice or true-false formats in testing. Avoid essay exams.
- Sometimes it is appropriate to de-emphasize the importance of spelling or grammar if the primary educational goal is self-expression or demonstration of understanding. Spelling and grammar can be taught separately.
- For organization of language, prewriting exercises can make a huge difference[56]; for example, graphic organizers, power point and specialized computer software.

For problems understanding spoken language:

[52] Lora Heller, Sign Language for Kids: A Fun & Easy Guide to American Sign Language
[53] Bondy and Fost, A Picture's Worth
[54] Joan Green, Assistive Technology in Special Education, 2E: Resources for Education, Intervention, and Rehabilitation
[55] Carol Gray, Comic Strip Conversations
[56] Graham and Harris, Writing Better: Effective Strategies for Teaching Students with Learning Difficulties

- Speak slowly and clearly. Keep it short and simple. Many children just need more time, smaller chunks or simpler paraphrasing. Repeat instructions. No shouting.
- Get visual engagement before speaking. Then work hard to keep your child's eyes on you throughout the communication.
- Supplement speech with non-verbal communication aides; gesture, animation, pictures, charts, graphs[57], drama, music, demonstration and hands-on activities.
- If a child has a special passion – sports, video games, TV shows, etc. - relate new and difficult concepts to those familiar interests.

For problems understanding written language

- Minimize the reading content in non-verbal tasks. For example, "Everyday Math" is great for some children but a big problem for language-impaired children. These children would do better with a more traditional, pure math approach.
- Use the auditory channel. Some children do much better with books on tape, electronic readers, reading aloud, group reading and taped instructions.
- Help your child make up a rhyme or use a mnemonic or acronym when they are trying to learn and remember written material.
- Act it out. Have fun with role-playing written narratives.
- Demonstrate. Some children understand best when adults model and help them walk through a set of instructions. Especially for multi-step tasks, first do it together. Your child has a better chance of understanding and remembering what s/he is supposed to do if you show versus command.
- To overcome problems with inconsistent eye-tracking, the child can be taught to use a finger, marker, index card or reading window.
- Associate reading materials with previously acquired knowledge or special interests.
- Preview new material. Read comprehension questions before reading the text. Use notes, outlines or study guides. Pre-teach concepts and vocabulary. Pre-highlight main ideas.
- Provide an easier text on the same content.
- Use an alternative to reading to present the same material; such as, movies, exhibits or field trips.
- Again, when appropriate, consider extended time and /or reduced reading load.

Strengthen strengths: Children with strong language skills can take full advantage of their natural gifts. Reading and writing should not just be considered academic necessities but inherently valuable and fulfilling activities. Children should be encouraged to read for pleasure and growth, write creatively and persuasively, and journal for release and self-discovery. Our culture attaches status to skillful speaking but family, friends, classmates and co-workers value skillful listening at least as much.

Side notes: No domain of child development is more crucial or complex than language. Although expressive and receptive language disorders are the most common source of

[57] Tufts, Visual Explanations (For teenagers and adults)

impairment in childhood, the many different types often go unrecognized and misunderstood. Due to the complexity of language and communication, careful assessment must move beyond simplistic distinctions between expressive or receptive, spoken or written. While some children have discrete language problems, many have a combination of different language disorders.

Comprehensive discussion, complete developmental norms, and myriad diagnostic instruments are available.[58] A complete review of language assessment is beyond the scope of this book – and the expertise of this author. However, to understand how Speech-Language Pathologists dissect language problems, it is important to have some familiarity with the range of language developmental differences.

As outlined above, ***receptive verbal language*** problems relate to incoming words: what a person "hears or reads" and what was actually "said or written". ***Expressive verbal language*** problems relate to outgoing words: what a person actually "says or writes" and what they would have liked to communicate. Children can also have ***receptive and expressive non-verbal language disorders***. These social-pragmatic language problems will be discussed in detail below, in the section on social skills. Here, we will focus on the subtypes of ***verbal language*** problems. This includes not just oral and written language but Sign Language as well.

Phonemes or speech sounds are the most elementary building blocks of language. Phonemes are like the atoms of language. To say the word "bat", three distinct speech sounds are pronounced: /b/, /a/ and /t/. These three phonemes blend together to form the word as it said and heard. These three phonemes are also coded into alphabetical representations to form words as written or read. Much has been made of how the English language does not have one-to-one correspondence between phonemes as they are said and written. True enough. But English is not as haphazard as many people think. Patterns of phoneme-alphabet coding-decoding can be taught.[59] Some children have a hard time recognizing or vocalizing these distinct sounds. They have problems with phonological processing or production. These children can have associated problems with decoding (reading), encoding (spelling), listening (registration), and/ or speaking (articulation).

Semantics refers to word meaning and word retrieval; that is, understanding and using vocabulary. We create words by combining phonemes. If phonemes are like atoms, then words are like molecules. Many words must simply be learned through repeated exposure or memorization. But knowledge of word roots helps with vocabulary building. (This is especially true for medical students; such as, oto = ear, larynx = upper airway, "-ology" = study of the ear, nose, and throat.) Similarly, suffixes ("-ful" and "-ness") and prefixes ("ex-" and "pro-") can further facilitate understanding of semantic language. But many words have meaning only if understood in context. These so-called semantic-pragmatic language difficulties are most obvious when children take the meaning of idioms too literally; such as, "It's raining cats and dogs," or "Let's shoot for the moon". Despite good phonological processing and production, some children can still struggle with

[58] Rhea Paul and Courtenay Norbury, Language Disorders from Infancy through Adolescence: Listening, Speaking, Reading, Writing, and Communicating, 4th Edition

[59] McGuiness, Why Our Children Can't Read and Reading Reflex

expressive and/or receptive language at the semantic level. Some readers decode phonemes fluently but have a hard time understanding the meaning of single words. Some speakers have perfect articulation but have difficulty finding the right word.

Syntax refers to the structure of language, especially as it pertains to sentence meaning. Syntax is like the chemical bonds and architecture of language. For example, the same three words can carry very different messages when their order is changed; such as, "Dog bites man" means something very different than, "Man bites dog." A failure to understand and use rules of grammar can turn past into future (walked vs. walk), many into one (feet vs. foot) and nouns into verbs (runner vs. run). Children who have difficulty with syntax and grammar can misunderstand or miscommunicate in subtle but significant ways.

Discourse refers to how sentences are put together. Depending upon how many data points or ideas are being connected, discourse is like the organs or organisms of language. Some children have increasing difficulty as chunks of language become progressively longer, more complex or more abstract. Metalinguistics, or language about language, can be especially difficult for many children and adults; for example, literary criticism that includes descriptions of foreshadowing in a novel or passive voice in an essay. Some children do very well with early and simple language milestones but have significant impairment when they are expected to use language at much higher levels of complexity and sophistication. These children often have difficulty with concept formation, inferential reasoning and memory.

Fluency refers to how quickly and efficiently language is processed (receptive) or produced (expressive). There can be dysfluency at the phonological level. For example, kindergarten screening includes *naming speed* for letters, numbers and words. Some children might be able to "decode" phonemes just fine on standardized tests or when the pace is leisurely but struggle mightily when required to read quickly or under high volume demands.[60] Similarly, children can perform within the normal range for basic spelling and writing skills but fall apart with increased demands on efficiency, pace, and complexity. This can present as a dysfluency in writing or speech. *Speech dysfluencies* such as stuttering and stammering are the traditional domain of the speech therapist. But many children, especially when stressed or emotionally flooded, have subtler problems with auditory processing speed and organization of language for expression on demand.

This discussion only begins to unpeel the complexities of language development. Fortunately, parents can usually make very educated guesses about the source of a language problem without getting their own Ph.D. or obtaining formal assessment by a Speech-Language Pathologist. Referring to the previous explanation of different language domains: Does your child have difficulties with receptive, expressive, written and/or oral language? At what level(s): phonological, semantic, syntactical, discourse and/ or fluency? Are there significant language problems in more than one of these domains? For sure, designing an effective language intervention program might require the expertise of reading, language, speech and/ or hearing specialists. However, most parents can understand their child's language profile well enough to accommodate language differences, understand how these differences explain behavior, customize behavioral strategies and know when it's necessary to seek expert help.

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[60] Wolf, Maryanne; Bowers, Patricia Greig, "The double-deficit hypothesis for the developmental dyslexias," Journal of Educational Psychology, Vol 91(3), Sep 1999, 415-438.

Although the QUICK SCAN is designed to keep assessment simple and practical, I hope that this dive into the deep end of language assessment was interesting and served fair warning: There's often more than meets the eye. In fact, for every facet of the QUICK SCAN, there are many more layers of analysis than I could – or should – attempt to cover. Expert assessment might be necessary to sufficiently understand any aspect of your child's profile. This is especially true regarding language. However, I hope the QUICK SCAN proves to be a sufficiently useful springboard for understanding and helping your challenging child.

Understanding Visual-spatial relations and Visual arts

What it means: All children should have regular screening for vision deficits. But even with normal vision, children vary in their aptitude for visual-spatial relations and visual art. Compared to other children of the same age, how does your child do with the following types of visual processing and production skills?

- Identifying different types of lines; such as, long and short, thick and thin, straight and curved
- Recognizing geometric shapes; circle, square, triangle, hexagon, etc.
- Recognizing the difference between geometric shapes (clear edges as made by tools) vs. organic shapes (flowing, curving and irregular as found in nature)
- Picking out hidden or different forms and objects
- Understanding pattern, line, shape, color, value/ shading, space and texture
- Understanding balance, symmetry, asymmetry and proportion
- Understanding the difference between 2D and 3D; foreground, middleground, background and other positional relationships
- Understanding depth; such as, relationships between near-large and far-small
- Identifying and telling colors apart; knowing the difference between secondary and intermediate colors
- Understanding graphs, diagrams and maps

"Good for/ problem if": Understanding visual-spatial relations and acquiring visual art skills are obviously important for drawing, painting, crafts, sculpture, photography, building and puzzles. These visual art activities may be emphasized in some schools but sadly not in others. A sense of visual-spatial relations is also important in math (geometry, graphing), science (astronomy, anatomy, computers and chemistry), geography (maps) and architecture (drafting). Also, the ability to visualize can be important for comprehension in listening and reading. Children and adults with poor visual-spatial skills can get lost navigating standardized test answer sheets, pictures, graphs and other modes of visual communication. Some children have legitimate trouble finding their way about school or around town. Eventually, they grow up to have difficulty hiking, driving or boating. From an early age, children vary in their appreciation of visual art and their enjoyment of the creative process. Countless visual activities can provide fun and challenging activities for social connection, personal development and pleasure.

Accommodations: Strategies to accommodate visual-spatial weaknesses include the following:

- Preview and coach the child when visuals are too complicated for his or her level of understanding or skill.
- Demonstrate and teach the child how to break down complicated visual wholes into simple isolated parts.

- Translate visuals into written or spoken directions. For example, maps can be converted to step-by-step instructions.
- Some children get lost even within the classroom; more so, navigating larger buildings and neighborhoods. Color codes can be used to mark paths. Landmarks can be clearly identified. Peer travel partners can serve as escorts. Adult shadows can prompt as needed. GPS has been a life-saver for the directionally challenged.

Strategies to accommodate visual arts weaknesses include the following:

- Scaffold output by providing stencils, outlines, and paint/ draw-by-number.
- Reduce art workload by finding alternate means of expression.
- Break down assignments or tasks into smaller chunks.
- For children who might feel hesitant or even embarrassed about their artistic skills, adults can provide extra encouragement and privacy.

Strengthen strengths: Children with visual spatial strengths should be given plenty of opportunity to see great art, design, graphics and architecture. This includes geography, navigation and astronomy. They should have regular opportunities for informal practice and formal instruction.

Side notes: Here, a personal note. My friends and family know all too well: I should never be trusted to leave the house without GPS. Ever since I was a very young child, my life has been marked by a long series of navigation misadventures. My mother tells a story from when I was boy. I was playing in the neighborhood and got home late – as usual. Worried, she asked, "Where have you been?" With some feigned nonchalance I answered, "Guys don't like saying where they go." The truth is, I never had a clue where I was! In my defense, then and now, I am always on time. I'm just never in the right place. My wife, on the other hand, struggles with "on-time arrival" but she has a great sense of direction. I imagine that she must have an extraordinarily well developed "mapping region" in her brain, just like the London taxi cab drivers described in a famous MRI study. Lucky for me, I married the right person – a very good fit - not just for her stellar directional abilities. Plus, GPS came along granting me some independence.

One snowy winter, when I was a 4th year medical student and GPS apps had not yet been invented, I went to Madison, Wisconsin for an extraordinary Child Neurology rotation with the revered Dr. Ray Chun (b.1926-d.2014). The first Monday morning, allowing plenty of extra time to walk through the snow from my apartment to the pediatric medical center, I got lost – as usual. Very late and flustered, I finally arrived in the middle of Neurology Rounds. Dr. Chun was addressing a group of medical trainees. Covered with snow and obviously embarrassed, I paused in the back of the room. With a warm smile, Dr. Chun interrupted his lecture and said, "You must be Dan Shapiro." Sheepishly, I said. "Yes." Then he said a few words that changed my life: "Well we were just talking about Krabbe Disease but let's change up and talk about your brain instead. You traveled all the way from DC to spend the month in Wisconsin. My guess is that you were very motivated to get here on time. You probably wanted to make a good first impression? Something must have made that hard." Apologetic but feeling a strange sense of relief, I explained, "As always, I got very lost." He smiled and said, "Then let's talk about your right parietal lobe." This was my introduction to the idea of brain-based developmental differences. In that moment, Dr. Chun became for me (as he had for so many others) a model of a non-judgmental, empathic and compassionate care. From that day on, I have remained intrigued about the whole range of developmental differences.

Although I was happily dependent upon my wife and cell phone for navigation, I had never been satisfied with my drawing skills. And nobody could hold the pencil for me. Michelangelo was one of my childhood heroes but my own drawing development plateaued out at the stick figure/pre-kindergarten level. For years, I remained jealous of people who could sketch so naturally. But then, mid-career, I needed a series of cervical spine operations. This meant some time out of work and some long prednisone-fueled nights awake. Just when I was starting to go stir-crazy, a friend brought me a care package; including, a sketch pad, pencils and an instruction book.[61] For lack of anything better to do, I went through the exercises. I learned how to forget about drawing things and focus instead on lines, angles, and spaces. Much to my amazement, I learned to draw.

What would have happened to my visual-spatial development without my wife and GPS? Would I have learned to draw if not for neck surgery and a thoughtful friend? Similarly, in ways unforeseen, your child's disabilities might not matter as much in the future. Or skill deficits might prove more modifiable than you'd ever imagined.

Music

What it means: Some children have difficulty acquiring musical skills. Just like verbal language, musical language has its expressive and receptive aspects.[62] Various components of making and hearing music are well defined – melody, rhythm, harmony, tone, composition and performance. The brain basis of musical ability and disability can be understood at various levels of complexity. Developmental norms for musical ability are fuzzy. At what ages should children be able to recognize or sing a melody, imitate songs, keep rhythm and tempo, read music, understand meter, hear and make harmony, understand the emotional character of music, sing or play in an ensemble, improvise and compose? When should a child be able to learn different musical instruments and at what level of proficiency? To a large degree, music development depends upon exposure, opportunity and positive instruction. Assessment of musical development depends upon subjective comparisons of ability, ease and pleasure.

"Goodness of fit"

- *"Good for"/ "Problem if":* In musical settings and activities, children have different levels of comfort, joy, distress or aversion. But the extraordinary range of benefits should make music exposure and music education an essential part of growing up.[63] Music can help children learn and thrive in every other area of development. Many studies demonstrate that music helps with language, reading, math, problem-solving, reasoning, imagination and flexibility. Music can promote listening skills and memorization. Music training can help with the development of eye-hand coordination, spatial abilities and timing. Music can fuel people to maximize physical exercise. Music training can help children learn perseverance, discipline and hard work; plus, how to tolerate mistakes and overcome anxiety. Music can reduce stress, help with relaxation and improve overall emotional health. Musical ability correlates with better scores on standardized tests of achievement and

[61] Betty Edwards, Drawing from the Right Side of the Brain
[62] Daniel J. Levitin, This Is Your Brain on Music: The Science of a Human Obsession Paperback
[63] Oliver Sachs, Musicology

intelligence. Music can motivate children to go to school. Music can be a wonderful source of connection with other people and a foundation for meaningful friendships. Learning to make music together means learning cooperation and teamwork. Music can be a means of self-expression, achievement and positive self-image.

- *"Parent-child fit":* Parents who have poorly developed music skills may have difficulty enjoying or helping with their child's musical activities. On the other hand, musically inclined parents might feel sadness, frustration or disappointment if they have a child for whom music does not seem as easy or important. Because music can be central self-image, parents and children with differences in musical taste can experience secondary tension or even conflict. Parents may feel threatened when their child's musical preferences pull them away; especially if these other musical influences seem powerful, undesirable or even dangerous.

Accommodations: Strategies to accommodate are based upon understanding and acceptance that children can have very significant differences in musical ability and affinity. Some children just don't seem to enjoy music. They might even seem irritated; covering their ears or withdrawing to music-free zones. Children with poorly developed musical ability should not be put on the spot or embarrassed. In very loud musical environments, volume can be reduced or the child can use ear plugs or headphones. Such children can be allowed to hang at the periphery and enter these music zones gradually.

Efforts should be made to discover pleasurable modes of musical exposure and expression. The child with fine motor coordination problems should probably not be started on saxophone or harp; rather, voice, trumpet or autoharp. The child with easy fatigability should not be started on trombone or French Horn; rather, electronic piano. The visual child should play the piano, guitar or other instruments that allow them to see melodic lines and chord structures on the key or fingerboard. Conversely, the auditory child might do well on harmonica; the tactile child, strings; the kinesthetic child, percussion; and the child with good oral-motor control, brass. For many, the computer has become an extraordinarily flexible and welcoming musical instrument.

For instruction, children with weak language processing might do best with Suzuki Method, which is based simply on hearing, imitating and repeating. Standard musical notation can be converted to fingering charts or tab notation. Demonstration and imitation can replace note-reading altogether. Motivation might depend heavily upon respecting your child's song and style preferences. This might mean abandoning traditional method books and simply asking the child, "What's your favorite song?"

Strengthen strengths: Every school, from kindergarten through college, should have a strong musical arts program. From an early age, all children should be encouraged to sing or learn an instrument; hopefully more than one. Those with special abilities and affinities should receive extra instruction to maximize their musical potential and pleasure. Adults should help create opportunities for children to make music together; ranging from school bands and choirs, to garage bands and electronic music.

Side notes: As with every other aspect of your child's profile, musical ability does not develop in a vacuum. As discussed above, differences in behavioral style and skills affect music development. Conversely, musical abilities can have a profound impact on other facets of development. Nowhere is this dialectic more remarkable than in the interplay between musical and social development.

Social and environmental factors can have a profound impact on the development of musical ability. Think about your child's level of music exposure across settings; home, school and other activities. Is your child's environment music-rich or music-poor? Does your child listen to, sing or play music with family, schoolmates and friends? Is music a vehicle for sharing emotional experiences, interpersonal connection, fun and creativity? Has your child's music education been dry or moving, perfunctory or inspirational, programmatic or beautiful? Your child's success in developing musical ability may depend in large part on whether the music teacher was "really nice" or "way cool". Your child's motivation in music and all other pursuits depends upon their interpersonal relationships.

On the other hand, musical ability can have a profound impact on social development. Many children with ADHD, learning disabilities, autism and mood disorders have difficulty with interpersonal relationships. When so many other parts of their life can be filled with frustration and disappointment, relative strengths in music can represent both a launching point and safe harbor. Looking back on their lives, how many children will most value those people with whom they sang and played music? How many children will be lucky enough to have had a musical instrument as an ever-present best friend?

Math

What it means: Some children are naturally drawn to math. They enjoy number problems and take pencil to paper with confidence. Other children feel the "wrath of math". They might become anxious and avoid all kinds of mathematical tasks.[64] Difficulty with basic number concepts can appear early in life. The average age for first counting one block is 3.5 years; for first counting 5 blocks, 4.5 years. Other children struggle only when confronted with higher level mathematics. Moving into the early school years, your child might have difficulty with simple calculations; such as, addition, subtraction, multiplication and division. Other children struggle with math concepts; such as, fractions, decimals, variables and irrational numbers.

Often, difficulties in non-math areas sabotage success in math.

- Visual perception problems may cause fractions such as 4 and 1/5 to be seen as 1/45 or 41/5. "Figure-background deficits" can cause difficulty visually locating the decimal point. Numbers can blur and run together.
- Abstract reasoning problems can be very difficult. For example, although "2/5" and "two out of five" are represented in different ways, they mean the same thing. Some curricula are heavy on "everyday math" applications. Such emphasis on solving word problems can be especially burdensome for children with language difficulties. Some children are confused by the way "3rd, 4th and 5th" changes the meaning of the numbers "3, 4 and 5". Instructions to "shade in $^{3}/_{4}$" will leave some children baffled if they do not know what it means to shade.
- Some words in common use can be confusing when applied to math, for example, *improper* fractions, *mixed* numbers and *lowest* terms. One quarter means 25 cents in everyday language but can mean $^{1}/_{4}$ in math.

[64] Mel Levine, All Kinds of Minds

- Auditory discrimination problems can create confusion hearing the difference between: tenths/ tens, hundredths/ hundreds, etc.
- Difficulties with attention, memory, strategic thinking and anxiety can have a profound impact, especially with increasing mathematical complexity. It is not unusual for some children to easily master math concepts but have surprising difficulty generalizing application to different types of routine problems.

"Goodness of fit"

- *"Good for"/ "Problem if":* Of course, math ability is important for academic success; but not just in math class. Mathematical and statistical concepts are also relevant in language processing and production, science, social studies, economics, psychology, arts and crafts, music, study skills and more. Outside of school, math concepts underlie sports, social interaction, time and money management, cooking and play; plus many more household and self-care tasks. The range of everyday math-based activities may be surprising; including, card and board games, pizza-cutting, batting averages, phone numbers, computer use and medication management.
- *"Parent-child fit":* As with all other skills, when parent and child share a strong interest and ability, there is less likely to be a frustrating discrepancy between expectations. However, parents with poor math skills may have difficulty doing math activities with their children. And woe to parent and child when neither one knows how to do the math homework.

Accommodations: In math as elsewhere, strategies to accommodate are based upon understanding and accepting the child's difficulties. Again, care should be taken to spare the child embarrassment and unnecessary frustration. Math anxiety is common; especially because of math's relentlessly cumulative nature.[65] Unlike many other subjects, performance at each level of math depends upon mastery of skills at lower levels. Fail to learn your addition or multiplication facts and you are a goner with long division. Parents and teachers should be especially careful not to fuel a child's frustration by expressing their own exasperation. These children should not be called to the blackboard unless the teacher knows that they will "get it right". Sometimes, the child can be given a problem the day before to rehearse their answer before called upon to perform in front of others. Although basic skill gaps must be remediated, temporary deficits or dysfluencies can be bypassed by allowing calculators or extra time on some tests and assignments. Such accommodations can help math-challenged students keep pace with new concepts. Math anxiety should be reduced by presenting new information in small chunks, breaking down multi-step tasks and cutting the volume of some homework assignments.

In school and out, some more specific techniques for bypassing math-learning problems include the following:

- Use visual cuing. Highlight important details with boxes, circles and lines; such as, the operational sign. Use specific color cues; such as, write the whole number in red and the fraction in blue; or change the decimal point to a different color than the numbers.

[65] S Tobias, Overcoming math anxiety

- Try big-boxed graph paper to help keep numbers lined up for proper calculations. If not available, lined paper can be turned sideways. Make sure to provide extra workspace on the page to avoid visual clutter; perhaps even a separate page for each problem.
- Use manipulatives as crucial comprehension and calculation aides; for example, coins, unit strips, fraction boards, blocks, pies and other foods.
- Assign fewer problems and give more time.
- Alter, adjust or reinforce the text. For example, in word problems, highlight key words and number multiple steps.
- Test for understanding, not rote memorization or speed. Allow calculators, open book tests, multiplication and formula charts.

Strengthen strengths: Geeks rule! In today's world, the mathematically inclined enjoy some huge advantages. STEM (science, technology, engineering and math) plus accounting and business career paths are wide open to those so gifted. Statistics now underlie an extraordinary range of vocations.[66] The opportunities for math development are now innumerable! It has become cool to do Sudoku puzzles, participate in math bowls, and program computers just for fun.

Side notes: By now, I hope that you have come to see the interplay between developmental domains as a central theme of this book. Here's another example of developmental cross-pollination: using math to help children understand and modulate their own activity level, initial reaction, intensity of reaction and adaptability. Math for self-regulation and social-emotional development!

Children who have difficulty with emotional flexibility and modulation operate on a binary system; as if the only numbers are 0 and 1. The only possible states are on or off. The only possible choices are black or white. If it's not heaven, it's hell. If it can't be perfect, it can't be anything at all. For these children, it's as if the number 2 through 9 do not exist, not to mention 2-99! Parents and professionals can use numbers to teach a broader range of behaviors, emotional states, coping strategies and solutions. By teaching a larger set of representational numbers, children can learn better self-awareness. This is the first step towards improved self-regulation. For example:

- How is your motor running?[67] 0 = off, 1 = idling, 2 = slow, 3 = medium, 4 = fast, 5 = super-fast. How fast should it be running: At home? On the playground? In the classroom? At the store?
- Fear thermometer.[68] 0 = no big deal, 3 = I'm a little uneasy, 5 = maybe I can handle it but I'm not sure, 7 = I don't think so, 9 = really hard, 10 = no way.
    - How much fear or anxiety ***do*** you experience when exposed to specific stimuli or situations?
    - How much fear or anxiety should you experience?
    - How much of a gap is there between do and should?
    - Let's try some strategies and see what happens to those numbers in one week.
    - How long do you think it will take for you to close the gap?

[66] Joel Greenhouse, "Statistical Thinking: The Bedrock of Data Science" The Huffington Post, 07/26/2013
[67] Leah M. Kuypers, The Zones of Regulation Book
[68] Bonnie Zucker, Anxiety-free Kids

- Rate possible solutions.[69] Given a specific problem (home, school or with friends), let's rate possible solutions: 0= stinks, 1= bad, 2 = ok, 3= good, 4 = very good, 5 = excellent.
- Assess progress. If 0 is where you started and 100 is your goal, what percentage improvement do you think there's been so far?
- Behavior modification.[70] Parents and children can quantify degrees of success by using money, tokens, points, puzzle pieces, marks, marbles, etc.
- Turn-taking can be tied to number concepts; such as, fixed ratios ("I do one and you do two.") or games of chance ("Guess a number between 0 and 10.)

In these ways and more, math concepts are key to much of modern measurable outcomes-based psychotherapy.

Time Awareness, Planning, Organization, and Implementation

What it means: Children have very significant differences in their ability to initiate, sustain, inhibit, and shift. Some children have trouble keeping track of time or things. These so-called Executive Functions, based in the prefrontal cortex of the brain,[71] also include time awareness, planning, organization and implementation. It is difficult to assess these skills in very young children but typically developing preschoolers should be starting to develop some rudimentary executive skills. How does your child do knowing the difference between morning, afternoon and night? Being aware of the hour, day, date, month and season? Learning to tell time? Being aware of time passing? Estimating how long activities will take and minding their pace? Is your child successful planning, strategizing, sequencing and preparing? Is your child able to self-assess and self-monitor? How does your child do organizing his or her materials and spaces? Knowing where to put or find clothing and supplies for school or play? How about bringing school or play materials? Keeping the school desk, cubby or locker organized? Maintaining a neat bedroom?

"Goodness of fit"

- *"Good for"/ "Problem if":* Organization skills are essential for academic success; especially as homework and study demands increase. With each passing school year, task complexity and performance expectations both rise. How is your child about knowing what to do and how to do it? Handing homework in on time? Tracking assignments and work at an appropriate pace? Employing strategies for test-taking? Proficiency with these types of executive skills is essential for academic success and positive self-image. Difficulty with this type of planning and implementation can lead to under-performance, stress and loss of motivation. [72]

  As emphasized in other sections, time awareness, planning, organization and implementation skills are crucial for success outside of school. Knowing when, where and how is also important for family functioning, social interaction and adaptive life skills. Think about the crucial role of executive functions in morning routines, evening routines, self-care, chores,

[69] Philip Kendall, Cognitive-Behavioral Therapy for Impulsive Children
[70] Cooper, Heron and Heward, Applied Behavior Analysis 2nd edition
[71] J Fuster, The Prefrontal Cortex
[72] Joyce Cooper-Kahn and Laurie Dietzel, Late, Lost, and Unprepared: A Parents' Guide to Helping Children with Executive Functioning

getting together with friends and participating in extracurricular activities. From taking care of the family dog to finding a baseball mitt, these managerial skills are essential.

- *"Parent-child fit":* The complex and demanding job of raising children requires parents to have adequate time awareness, planning, organization and implementation skills. If parent and child share excellent organization skills, many of life's stresses can be anticipated and minimized. On the other hand, parents with weak executive skills may feel overwhelmed, anxious or depressed. Especially if parents and children share a problem with staying organized, chaos can reign. The parent–child relationship can be stressed and strained. Such households can put children at a disadvantage.

Accommodations: Strategies to accommodate children with executive dysfunction amount to "outsourcing your child's prefrontal cortex" to an executive secretary.[73] Usually, this means a high degree of parent involvement but the planning and organization team might also include other family members, teachers and tutors.[74] Children with executive dysfunction should not be admonished to just try harder.[75] However, they do need to accept help and use compensatory organization systems. If parent and child acknowledge these skills deficits, then supports can be put in place and stress lowered.

Starting at an early age, morning and evening routines should be well established. Day-to-day variation should be kept to a minimum. In general, these children do well with regularity, routine and ritual. The schedule must be structured but flexible. Your child will need help with contingency planning. More strategic thinking means less stress.

Parents and teachers should work together to schedule up the typical day. From waking in the morning until sleep at night, the schedule should be comprehensive and detailed.

You might need to divide the day into routines subroutines and mini-steps. There should be regular planning periods; for example, every Sunday for the week ahead, every Friday for the weekend and every afternoon for the time left until bedtime. In broad outline:

- The *morning routine* involves waking up at a certain time, getting dressed, eating breakfast, brushing teeth, grabbing the backpack (prepared the night before as part of evening routine) and getting out the door.
- *School routines* should be clear. If necessary, the schedule should be posted and reviewed at the beginning of each day. The child should know the progression of events; where to go, when and what to have ready each step of the way.
- *Homework routines:* At the end of the school day, teachers can check the back pack and assignment book. Parent-teacher communication should be regular and sufficiently detailed. Teachers can provide homework accommodations; such as, comprehension checks, advance notice, assignment break-down and grading on understanding not work efficiency. At home, work and activities for the afternoon and evening should be broken down into doable chunks and assigned to the schedule. As needed, parents should help with jump-starting, supervision, pacing and positive reinforcement.

[73] Peg Dawson and Richard Guare, Executive Skills in Children and Adolescents: A Practical Guide to Assessment and Intervention
[74] Rhona Gordon, Thinking Organized
[75] Mel Levine, The Myth of Laziness

- *Evening routines* include dinner, homework, play, family time, electronics, reading, next day preparations, clean up, wind down time, bathroom, bed time and lights out.
- *Family-social planning:* Family, friends and free time should also receive scheduling priority; including, family activities, extracurricular activities, playdates, hanging out with friends, appointments, travel, vacations and eating out. Common stress points can all receive advance discussion and problem-solving; for example, TV, video, computer, homework and time with friends.
- *Clarity:* Across environments, try to keep the routine front and center. Use electronic calendars, cell phone apps, pictures, posters, to-do lists, checklists, timers, clocks, hourglasses, alarms and post-it notes; whatever external props, cues, and prompts are necessary, age-appropriate and effective.

Children with executive skill deficits need help organizing their materials and environment. From a very early age, children should learn proper places for everything; coat, backpack, lunch bag, etc. Whether preparing for work or play, parents and teachers preview and supervise proper use of drawers, cubbies, folders, boxes, lockers, notebooks and desks. Life-skills prep should take place across all settings; home, school and social.

Strengthen strengths: While looking out for children with executive dysfunction, we should not fail to appreciate others who seem to be natural-born organizers and problem-solvers. Managers are essential to every ball game, band practice, home video production and trip. Such directors and coordinators might enjoy minding the details that others avoid. Parents and teachers can look for these positive planning and leadership opportunities.

Side notes: But what about the long-term for those who struggle with executive dysfunction. To some parents, accommodation for these kinds of difficulties may sound like coddling, enabling and spoiling. "When," you might ask, "will my child learn to accept responsibility and take care of him or herself?" Throughout the the *Parent Child Journey*, we discuss behavioral interventions to promote self-care and independence. Whether we are talking about executive dysfunctions or any other set of skill deficits, accommodation is never enough. If we only accommodate without correcting skills deficits, your child will become more dependent and poorly equipped to make their way in the world.[76]

So why, throughout this Instruction Manual, is there such an emphasis on accommodation? Quite simply, accommodation is quick and skill building takes time. Until your child's abilities improve sufficiently, accommodation will be necessary. While your child gradually works towards greater degrees of independence, a certain amount of accommodation will be necessary to avoid frustration, loss of motivation and avoidant behaviors. Over the years, your child will grow and the landscape will change. But for now, you and your child need to make adjustments and find the right balance of both accommodation and intervention.

How long will this level of support be necessary? Every child is different. In general, serial MRIs of the brain's executive centers show ongoing maturation beyond 30 years of age.[77] Remember: Your child will not be fully formed adult on the day of graduation from high school. Think for a moment

[76] Mel Levine, Ready or Not, Here Life Comes

[77] Jay Geidd et al, Brain development during childhood and adolescence: a longitudinal MRI study, Nature Neuroscience 2, 861 - 863 (1999)

about the maturational difference between most 20 and 30 year olds. There's no need to despair if your child needs ongoing support. Brain maturation and cumulative life experience will continue to make a positive difference into adult life.

Social Skills

What it means: A complex network of brain modules and networks underlies the development of social skills.[78] Some children have primary deficits in social development; that is, Autism. Other children have social delays secondary to differences in behavioral style; such as, attention deficits, impulsivity, inflexibility, intensity of reaction and sensory reactivity. Still others have social difficulties because of other skills deficits; such as, disorders of expressive or receptive language, fine or gross motor coordination and executive functions. Finally, many children have social struggles because of environmental factors; such as, deprivation, abuse or other life stress. Often there is a combination of factors. Social development continues life-long. Here are some average ages for early social milestones:

- Smile responsively at 1 month
- First wave bye-bye, play pat-a-cake and indicate wants at 8 months
- First imitate another person and play ball back and forth at 10 months
- Point to share interest at 12 months
- First "help" in the house at 14 months
- Feed a doll at 17 months
- Engage in simple symbolic and imaginary play by 20 months
- Share and take turns by 24 months
- Play board or card games by 36 months
- Complicated dramatic play with plots and emotional themes by 36 months

Over the ensuing years, children with strong social skills are natural "mind-readers" and "situation-readers". Intuitively, they understand what other people are thinking or feeling. They "get" the social context and modify their behavior accordingly. These children are very attuned to other people. They reliably read non-verbal cues such as body language, tone of voice and facial expression. They show affection and compassion. They are motivated to initiate, respond and reciprocate in social interaction. They enjoy playing and talking with other children their age. They are pleasant and appropriate with peers. They fit in easily and make good friends. They are skillful solving interpersonal conflicts. They show sympathy and come to the aide of social outliers. They feel good about their social life.

Children with weak social skills are relatively "mind-blind"[79] or "context-blind"[80]. Other people's actions, thoughts or feelings may be mysterious, confusing or negligible. These children struggle with cultural norms and act in unexpected ways. They have difficulty recognizing and processing important non-verbal cues. They may not interact much with peers. They tend to do better with adults and older or younger children. They feel anxious in social situations. They have trouble fitting

[78] Daniel Goleman, Social Intelligence
[79] Simon Baron-Cohen, Mindblindness: An Essay on Autism and Theory of Mind Revised
[80] Peter Vermeulen, Autism as Context Blindness

in. They may have poor play skills. They are not consistently successful making and keeping friends. They have difficulty with social problem-solving and relationship repair. Naïve and gullible, they easily fall victim to bullying or teasing. They wish they had more friends or better friends. They might lose social motivation and say they don't care about friendships at all.[81]

"Goodness of fit"

- *"Good for"/ "Problem if":* Social skills are crucial across a broad range of activities. When we think about social skills, we usually think about success in peer interactions. Whether or not your child develops friendships and positive peer relations is the most obvious and important measure of social development.

  Social skills are also crucial for success in school; not just on the playground but in the lunchroom, the hallway and the classroom. Academics skills are learned, in large part, through interaction with classmates. If school is largely about preparation for life then education should move beyond independent worksheets and standardized tests performance to group discussion, collaborative learning and joint problem-solving. Study after study demonstrates that school success – and future success in the work place - depends upon social-emotional intelligence; not just IQ, SAT or ACT scores. The ability to work with others is central to academic achievement. A successful childhood should not be measured by admission to prestigious colleges; rather, the development of ethics, morality, self-control, grit and compassion.

  Social skills are also essential to the development of life skills and healthy family functioning. Mealtime behavior, sharing, taking turns, participation in family and community activities, doing chores, morning and evening routines, resolving conflicts and sibling relations all depend upon social awareness, social skills and self-regulation.

- *"Parent-child fit":* Parents who have problems with social awareness, self-awareness and social skill may have difficulty modeling for - or even relating to - their own children. These parents might also struggle working with other adults who are involved in their children's lives; such as, their spouse or co-parent, other family members, health professionals, teachers or other parents. On the other hand, parents with strong social skills are usually more comfortable setting an example for their children at home and advocating for them across settings.

Accommodations: There are many ways to help your child develop social skills and independent success. However, on the playground and in the playroom, most children with social skills deficits depend upon parents and teachers for different levels of real-time support. Here, we will only consider strategies to accommodate social skills deficits.

These accommodations are based upon understanding and accepting your child's current level of social development. For some children, their "social development age" might lag quite a bit behind their chronological age. We should not give 6th grade reading material to a dyslexic child who can only read at the 2nd grade level. Likewise, we need to choreograph and modify the interpersonal

[81] Richard Lavoie, It's So Much Work to Be Your Friend: Helping the Child with Learning Disabilities Find Social Success

experience of socially delayed children to match their developmental readiness.[82] These children should not be put into social situations that cause confusion, embarrassment, frustration or loss of motivation. Parents and teachers should customize and choreograph social interaction. This adult facilitation usually requires their sustained attention, supervision and role modeling. Once the child is successful at one level of socialization, they can advance to the next and extra support can be gradually withdrawn.

Social choreography should address the following factors:

- *Structure:* Quite simply, children with social skills deficits need more social support. Unstructured time should be structured up. Social activities should be tightly scripted. Direct social coaching and facilitation may be necessary. Adult supervision can be faded over time; but not too quickly.
- *Familiarity:* Children with social skills delays will do better with activities that are well within their comfort zone. Social success can be derailed if a child is forced to both interact with peers and experience new things simultaneously. This social multi-tasking can lead to sensory or emotional overload and increasing social anxiety. These children have an easier time interacting with other children if activities and settings are old and familiar. Novelty should be limited or introduced gradually and incrementally. The unfamiliar can be rendered more familiar through preview and rehearsal. Use visual schedules, social calendars, social stories,[83] comic book conversations, social scripts, rule reviews, guided practice and role plays. All of these techniques can help socially awkward children anticipate expectations and complexities.
- *Competence and interest:* For children with social skill deficits, social success is more likely if they are operating in area of relative strength and interest. Follow your child's bliss. Instead of thinking about *who* your child might connect with, consider *what* your child enjoys doing. Then find another kid who shares the same interest. After all, adults have different friends for different types of activities. Children can learn to match friends to interests as well. Teachers and parents can spotlight special talents and interests, raising such "outliers"[84] social status and self-image.
- *Play skills:* Children need plenty of play opportunities that are well matched to their play skills.[85] Some children use toys indiscriminately; not according to their specific functions. Others use toys according to their properties but in a very limited way. Over the years, children learn to use play objects in a greater variety of ways and combinations. With progressively more imagination and creativity, they learn to use objects to symbolize different things. Plots and emotional themes become more elaborate, thematic and dramatic. It is important to match play partners who are at roughly the same level of play skill.
- *Partners:* Ironically, peer play is hardest. It is much easier to play with parents, other adults or children who are much older or much younger. Often, for children with social delays, such age-mismatched play partners are better suited for social success. Older or younger play partners are usually more accommodating, tolerant or accepting. Sometimes, boys do better with girls and girls do better with boys.
- *Group size:* The larger the group size, the great the social complexity. Social stress can increase with a larger number of play partners. Children with limited social skills should have limited

[82] Michelle Garcia Winner, socialthinking.com
[83] Carol Gray, carolgraysocialstories.com and The New Social Stories Book
[84] Malcolm Gladwell, Outliers: The Story of Success
[85] Lifter et al, (1993) Teaching Play Activities for Preschool Children with Disabilities: The Importance of Developmental Considerations, Journal of Early Intervention, 17, 139 – 159.

social demands. If two's company, three might be a crowd. Before children can be successful 1 on 2, they should be consistently successfully 1 on 1.

- *Time:* Play times or other social activities should not go on too long. Parents should know how long their child usually lasts before things fall apart and plan to end the social activities 15 minutes earlier. Then play can end on a positive note, leaving both children wanting more. This is better than having things end on a sour note of misunderstanding, conflict or boredom. As my father-in-law would say, "Thanks for coming. Thanks for going."
- *Warm-up time:* Children who are slow to warm up should be given extra warm up time. This is like putting one toe in the pool at a time. Some children need just a few extra minutes hanging at the periphery to gradually acclimate. Others need extra hours, days, weeks or even months. As discussed in the section on negative initial reaction, beware the child who is tortured by prolonged transitions. They do better just "jumping into the deep end" then adjusting quickly.
- *Sharing, flexibility and social skills:* Children need to learn sharing attention and sharing toys. Finally, they need to learn sharing thoughts and feelings. There can be delays along the way. Again, parent expectations should match the child's developmental level. Some children might need explicit teaching and prompting to form a triangle of joint attention between an object and another child; similarly, between their thoughts and feelings. Over the years, they need to be coached out of a self- absorbed mind-set towards other-awareness and true interpersonal reciprocity.[86] There is a developmental progression from "my way" to "your way" to "our way". Emotional intelligence evolves from primitive black and white thinking, to intermediate awareness of primary feelings (happy, sad, angry, scared) to advanced understanding of emotional complexity and nuance (embarrassed, jealous, disappointed).[87] Children need to learn about these emotions both in themselves and in others. In the meantime, again, expectations should match abilities.

Strengthen strengths: If your child is naturally a "social animal", nourish his or her interpersonal life. Do not feel threatened by if he or she has looks beyond the nuclear family to a second family of friends. Especially for children who struggle in other areas, be thankful for a vibrant and grounding network of companions.

Side notes: What if your child remains socially different? It is important to remember that many people value their work over their relationships. Some children and adults are content not to socialize. This may run contrary to your idea of the "meaningful life". It is contrary to some science that emphasizes the important of relationships for a happy and healthy existence. However, many of History's most admired and important individuals were not at all socially successful.[88] Thanks largely to the growing importance of physics, science, computers and the Internet, an isolated existence is no longer synonymous with failure.[89] To quote Temple Grandin, the most famous autistic person in the world[90]: "You so-called normal people and your relationships! Don't give me an interview; just look at my work portfolio. I don't need a marriage or even your idea of a friend. Just let me have my special interests and a good job."[91] The Autism Pride and Neurodiversity Movements, are based

[86] Michelle Garcia Winner, Thinking About You, Thinking About Me
[87] Tony Atwood, The Complete Guide to Asperger Syndrome
[88] Silberman, Neurotribes
[89] Barry Prizant, Uniquely Human: A Different Way of Seeing Autism
[90] Oliver Sachs, An Anthropologist on Mars
[91] Temple Grandin, Informal communication with the author, 2002

upon the idea that our society needs to expand its narrow idea of success and meaning.[92] This is not to say that we should neglect to intervene where correction of skills deficits can improve quality of life. But sometimes, accommodation is more realistic and more respectful too.

People can be quick and harsh. Ironically, this insensitive rush to judgement can be more pernicious and problematic when the social impairment – or any disability - is relatively mild and hidden. It is not easy needing a white cane, a wheel chair or a helmet. However, such specialized equipment is obvious and more likely than not to illicit a sympathetic reaction. What about children who "look normal" but act differently? They too are at risk for success deprivation, mental illness and unemployment. Yet, these children with subtle but significant social disabilities – *and their parents* - might be less likely to get a helping hand; more likely to incur blame, shame, reprimand or punishment. Their relatively unexpected and misunderstood behaviors do not usually inspire respect and compassion. All too often, children with subtle social disabilities are dealt exasperated reproaches; such as, "What's your *problem*!" Note the exclamation mark instead of a question mark. After all, these are prejudiced verdicts not compassionate appeals for understanding. People with disabilities do not want pity but they do need accommodation; no matter how mild or severe the impairment may seem.[93] If the last chapter to be written in the civil rights movement is about disability rights, then perhaps, the last pages will be about hidden impairments.

Physical Health, Family, Environmental, and Other Life Stresses

What it means: Many children have very significant problems with physical health or environmental stresses. These stresses may seem minor when considered in isolation. Although frequently discounted, such stresses can have a major impact; especially when considered in combination. The QUICK SCAN Life Stresses checklist includes a wide range of such challenges. Health problems include hospitalizations, surgeries, physical or mental illnesses, disabilities, injuries and allergies; both in the child, family members or significant others. Many parents, struggling with the stress of raising a challenging child, experience significant problems with anxiety and depression. Family stresses can be secondary to death, mental illness, strained or fractured relationships, family restructuring, abuse, violence, financial hardship, work pressures, social and cultural challenges, and school problems. Ranging from over-scheduling[94] and playground conflicts[95] to poverty and tragedy[96], a child's behavior problems can be amplified or caused by a broad range of real world hardships. Parents should never underestimate the impact of these life stresses on their children - and themselves.

"Goodness of fit"

- *"Good for"/ "Problem if":* Although children are born with different temperaments and predispositions, they do not grow up in a vacuum. Brain-based differences are modified by environment. Your child's development is all about Nature *and* Nurture. Down at the level of your child's DNA, epigenetics is a fascinating new field that looks at how environmental

[92] John Donvan, Caren Zucker, In a Different Key: The Story of Autism
[93] Joseph P. Shapiro, No Pity: People with Disabilities Forging a New Civil Rights Movement
[94] David Elkind, The Hurried Child: Growing Up Too Fast Too Soon
[95] Stanley Greenspan, Playground Politics
[96] Alex Kotlowitz, There Are No Children Here: The Story of Two Boys Growing Up in The Other America

factors actually turn on and off different genes.[97] On a more mundane and familiar level, your child's behavior and mood are clearly modified by a multitude of life circumstances. Study after study shows that family, social and economic factors have a profound impact on learning, resilience, and development.

- *"Parent-child fit":* Some families are extraordinarily lucky. When environmental stresses are at a minimum, it is easier for your child to cope and overcome their developmental challenges. But many families are not so fortunate. Life can be complicated. Every family has limited time, money and energy; but some families are much more constrained than others. For many parents, essential resources may prove insufficient. A necessary minimum of environmental stability might be lacking. Beyond these environmental pressures, just raising a challenging child will stretch and strain any parent. When a child has special needs, mothers, fathers, siblings and other family members often feel confused, angry, guilty or overwhelmed. Parents might have physical or emotional stresses of their own. Due to the genetics of developmental difference, children and parents often share difficult temperaments, ADHD, Learning Disabilities, Mood Disorders, Autism Spectrum Disorders and other developmental differences. The apple may not have fallen far from the tree. Although parent disability on top of child disability can pose special challenges, shared experience can allow parents to be more sensitive and supportive of their children – and other children with developmental differences too. For all these reasons, for every child with special needs, there's a family with special needs too.

Accommodations: Throughout the Parent Child Journey program, I will discuss parent self-care and stress reduction. Here, suffice it to say, parents who do not take care of themselves will have a much harder time taking care of their children. Parents do not have to face these life challenges alone. To reduce child and family stresses, parents should turn to their pediatrician or family doctor; school teachers, counselors, and administrators; mental health providers, religious organizations, social service and government agencies; support groups and on-line communities; family and friends. People care. They want to help. They need to know what you are dealing with behind the scenes. If they know, then they can give you and your child a little extra sensitivity and support. There is no shame in seeking help for your child. There is no shame in seeking help for yourself.

Side notes: For decades, there has been a movement to reduce child development and human behavior down to genes and neurons.[98] The study of the brain has yielded ground-breaking and paradigm-shifting insights into the basis of developmental variation. Parents should no longer feel blamed or guilty for causing their children's difficulties. We have fascinating new tests and promising new treatments for the neurophysiologic abnormalities that underlie real-life impairment. This biological perspective is crucial to further advances in our ability to help children. However, such an increasingly narrow focus on biology is insufficient to explain the complexity of human variation[99] and so falls short of providing the kind of help people really need.[100]

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[97] Matt Ridley, Nature Via Nurture: Genes, Experience and What Makes Us Human

[98] Committee on Integrating the Science of Early Childhood Development From Neurons to Neighborhoods: The Science of Early Childhood Development Hardcover, National Research Council, Institute of Medicine, December 13, 2000

[99] Siddhartha Mukherjee, The Gene: An Intimate History

[100] Muin J. Khoury1, James Evans2 & Wylie Burke, A reality check for personalized medicine, Nature 464, 680 (1 April 2010)

As stated repeatedly throughout this book, children's brains do not develop in some kind of isolation vat. Neurodevelopment is the product of inborn differences ***and*** life experience. Developmental and Behavioral Pediatrics does include genetics and neurology; but also, and no less importantly, we should be informed by research and concepts from the worlds of social work, anthropology, economics, education, epidemiology, public health, toxicology, political science, law, history, art, philosophy and more. Let's consider the profound impact of just one such extra-neurologic perspective; family systems theory.[101]

No matter what kind of brain your child has, family relationships matter.[102] Family connections are usually lifelong, interactive, dynamic and deep. These intimate interpersonal forces exerting a powerful impact on personality development and life trajectory. Family relationships can be nurturing and intensely positive. Family members represent our primary source of play, social learning, support and love. Of course, families can also be a source of tension.[103] For some families, conflicts can be deep and frequent. There can be rivalry for attention, love and approval; including teasing, insulting, and competition; with potential for serious physical and emotional harm. Whether positive or negative, the impact of family relations on development and behavior is undeniable.

Child development and behavior are affected by a large number of complicated family variables: family size, birth order and spacing of siblings, multiple births (i.e. twins, triplets), temperament of parents and siblings; step-, adoptive and foster family structures; homosexual, heterosexual, single, or separated parents; family members with chronic illness or special needs, death of a family member; plus, an extraordinary network of different family relationships.

As discussed, "goodness of fit" between family members is highly variable across relationships, situations and phases of development. Parents have different levels of insight and skill. Going back to families of origin, those relationships and role-models have a profound effect on how parents treat their own children and each other. Each family member has different types of relationships with every other family member;[104] for example, "indifferent", "distant", "estranged", "conflicted", "harmonious", "close", "friendly", "loving", "hostile", "violent", "abusive", "manipulative", "controlling", "admiring"; and so on. Usually, relationships cannot be summed up using just one such label. Relationships between siblings and parents are more accurately described by an ever-changing combination of such characteristics.

The complexity of these interlocking family relationship triangles and their downstream effects can be as dizzying as any nerve network in the brain. One classic example: In a marriage, an overly responsive and controlling parent can cause their spouse to feel dependent, helpless and depressed. The child with the least emotional separation from the controlling parent might be especially vulnerable to tension in the parents' relationship. The child's anxiety might appear as physical symptoms (e.g. stomach aches) or behaviors (e.g. acting out). This can cause parents to shift attention away from their conflict with each other and turn together toward their child's symptoms. In this way, the developmental or behavioral problem might be caused - or at least influenced by - an unhealthy family dynamic. Clearly, such a child's symptoms are not entirely biological in the making. And these family dynamics can be passed down from one generation to another. What kind

[101] Daniel V. Papero, Bowen Family Systems Theory
[102] Michael P. Nichols, The Essentials of Family Therapy
[103] Napier and Whitaker, The Family Crucible
[104] Monica McGoldrick, Randy Gerson, Sueli Petry, Genograms: Assessment and Intervention

of brain scan, blood test or prescription can address all of this? Only the family systems perspective brings these important factors to light.

Life Stresses and Parent Child Journey

For parents seeking developmental-behavioral services, the crisis of limited availability and affordability might be one of your most significant life stresses. The QUICK SCAN cannot take the place of comprehensive neuropsychological and multidisciplinary assessment. However, when asked the right questions, I have found that most parents can give a very accurate description of their child's profile. The QUICK SCAN profile might even be more comprehensive and nuanced than some narrow and expensive subspecialty evaluations. A book and parent-training group is no substitute for individualized evaluation and treatment. But I hope that the *Parent Child Journey* represents a useful and accessible starting point.

For over 30 years, parent training groups based on different incarnations of the *Parent Child Journey* have been offered continuously. I first offered variations of this program in my primary care pediatrics office in Silver Spring, Maryland. When my focus shifted to Developmental and Behavioral Pediatrics, I partnered with area schools, agencies, religious communities and other professionals to offer this more evolved version of the parent program. Over the years, I have successfully offered this parent group training on a "pay what you can" basis. I encourage other professionals to give this model a try. I am pleased to report that parents who can pay more really do help out those who can't. Moreover, parents of challenging children have had the opportunity to meet each other and see that they are not alone. They have given each other invaluable understanding and support.

Your Instruction Manual: Parts B, C and D

And now for something completely different. So far, I have presented the QUICK SCAN in a conventional way. You've circled some numbers and read some text. These next sections are still very much in-development and not for everybody. But for those of you who are artistically, musically or graphically inclined, I hope you have some fun playing with these multi-modal treatments of the QUICK SCAN. Eventually, these pictorial, musical and graphic representations of the QUICK SCAN will be created automatically through an interactive on-line experience. Specifically, as you complete your QUICK SCAN, the boat, song and river map will magically appear. But for now, I leave you to your own creativity and imagination. And thanks for contacting me directly with any suggestions for further development.

Your Instruction Manual Part B: *Know Your Boat*

You and your child might choose to draw your own QUICK SCAN picture. As you complete the Quick Scan, feel free to have some fun creating a metaphorical picture. Start with a rough outline of Raph's (your child's) boat. Outline Raph (your child's) body and head in the boat. Then, according to the suggestions below, add different parts to the boat and Raph to symbolize different aspects of

your child's developmental profile. Better yet, exercise your own creativity and make up your own boat parts. Then do Hawk's (your own) boat. Here are some ideas for boat parts:

- *Motor activity:* Children with high motor activity act as if they have a "big motor" driving their boat. Children with low motor activity act as if they have a "little motor" (or just a little paddle) driving their boat.
- *Impulsivity:* Children with high impulsivity act as if the anchor for their boat is too little – or there's not anchor at the end of the rope at all! Children with low impulsivity act is if the anchor for their boat is too big.
- *Attention span:* Children with short attention span act as if they have a "constantly rotating 360 degree scanning radar" for their boat. It notices everything but only for a moment. Children with long attention span act as if they have a "fixed telescope" for their boat. It stays focused on one thing for a long time.
- *Initial reaction:* Children with negative initial reaction act as if their boat is very securely docked; tied up tight. The rope goes round and round a post or tree. There's a big knot. Children with positive initial reaction act as if their boat is unmoored. The rope is untied and the boat is easily swept away down the river.
- *Adaptability:* Children with high adaptability act as if their boat can turn and easily avoid obstacles in the river. They have both hands on the wheel. Children with low adaptability plow right ahead. They just go over obstacles without considering a change of direction. Their hands are off the wheel so they can't turn the boat.
- *Intensity of reaction:* Children with high intensity of reaction act as if their motor runs very "loud". Children with low intensity of reaction act as if their motor runs very "quiet".
- *Mood:* Children with generally positive mood usually have a smile. Children with negative mood often carry a frown.
- *Regularity/ predictability:* Children with high regularity and predictability act as if they have a big center-board and rudder. Their boat tracks steady and handles true. Other children act is if their center-board and rudder are broken. Their boats too easily veer and change course with the current.
- *Hearing sensitivity:* Children with high sensitivity to hearing speech act as if they have a walkie-talkie on one ear. Children witih high sensitivity to noise act as if they have one ear that's especially huge. Children with low sensitivity to hearing speech act as if they have an ear plug. Children with low sensitivity to hearing noise act as if they have "tiny little ears." Children with "mixed profiles" have two different types of ears.
- *Visual sensitivity:* Children with high visual sensitivity act as if they have "big eyes." Children with low visual sensitivity act as if they have "little eyes".
- *Taste and smell sensitivity:* Children with high sensitivity to taste act as if they have a big tongue. Children with high sensitivity to smell act is if they have a big nose. Children with low sensitivity to taste act is they have a little tongue. Children with low sensitivity to smell act is if they have a little nose.
- *Touch sensitivity* Children with high sensitivity to deep touch act as if everything that touches them is a "stingray" or "bumblebee stinger". Children with high sensitivity to light touch act as if they have "extra fingers". Children with low sensitivity to deep touch act as if everything that touches them should be an "8-armed hugging octopus". Children with low sensitivity to light touch act as if they have a mittens on their hands.

- *Movement sensitivity:* Children with high sensitivity to movement always stay seated in the boat. Children with low sensitivity love to stand up – even dance - in the boat.
- *Internal Body Awareness/Physical Symptoms sensitivity:* Children with high sensitivity to internal body sensations act as if they often have a "high thermometer reading". Children with low sensitivity to internal body sensations act as if othey have a "normal thermometer reading."
- *Fine motor skills*: Children with above average fine motor skills act as if they could easily thread a small hook on a thin fishing line. Children with below average fine motor skills act as if they could only catch a fish with a net.
- *Writing mechanics:* Children with above average writing mechanics act as if they could do professional calligraphy on the side of their boat. Children with below average writing mechanics could only make a sloppy "X".
- *Gross motor skills:* Children with above average gross motor skills act as if they could easily get out of a boat climbing a ladder. Children with below average gross motor skills act as if they would need a slide to get out of a boat.
- *Oral expression skills:* Children with above average oral expression act as if they speak with exclamation marks. Children with below average oral expression act as if they speak with question marks.
- *Written expression skills:* Children with above average written expression act as if they could send a long note in a bottle. Children with below average written expression act as if they would rather send the pencil in the bottle.
- *Listening skills* Children with above average listening skills act as if their brain registers an exclamation mark. Children with below average understanding of oral language act as if their brain registers a question mark.
- *Reading skills:* Children with above average reading skills act as if they always want to carry a book. Children with below average understanding of written language act as if they would rather throw a book in the river.
- *Visual spatial/ art skills:* Children with above average visual-spatial and visual art skills, act as if they always have a camera ready. Children with below average visual-spatial and visual art skills act as if they are wearing dark sunglasses.
- *Music skills:* Children with above average music development music notes dancing in their heads. Children with below average music development act as if a musical note is lying down asleep in their heads.
- *Math skills:* Children with above average math skills act as if the brain understands "infinity". Children with below average math skills act as if the brain understands "zero".
- *Time awareness, planning, organization and implementation skills:* Children with above average time awareness act as if "time stands still". Children with below average time awareness act as if "time flies." Children with above average planning and organization skills act as if signs along their way reliably point them in the right direction. Children with below average planning and organization skills act as if signs along their way point in multiple directions at once.
- *Social skills:* Children with above average social skill act as if they have a life ring ready to throw to others. Children with below average social skill act as if they have a rope to throw to others, but it is not attached, either to the side of the boat or to a life preserver.
- *Physical / environmental health:* For children with above average physical and environmental health, it seems as if the sun is always shining. For children with below average physical and environmental health, it's like the sky is full of dark clouds.

Your Instruction Manual Part C: *Know Your Song*

"Raph's Song" (child) and "Hawk's Song" (parent): Once the Instruction Manual goes on-line, the song will be written and played for you. But for now, feel free to give it a try yourself. Pick your own melody. Make up your own words.

My version of Raph's and Hawk's songs represent variations on a simple melody I wrote as a teenager. For each facet of your intertwined profiles, you will add a different verse to each of your songs. For each developmental domain, the melody in each song moves up or down depending upon your individual differences. Hawk's soaring melody starts a perfect fifth above the earthbound Raph's. Hawk's song moves to the long and graceful 3/4 beat of his wings. Raph's song moves in shorter beats and more incremental 6/8 time. Although Hawk and Raph's songs may be different, they can still be sung together in beautiful harmony. This actually works!

Again, sorry, some of the lyrics (e.g. "*Tambalacoque forever")* won't make sense until publication of th whole book. For now, I'll leave you in a state of confused curiosity.

Chorus (together):

Raph and Hawk travelin' miles and miles
Up the river together
Logs and lightning and rocks on their way
Tambalacoque forever

High motor activity: Fast I go
Low motor activity: Slow I go

High impulsivity: I can't stop
Low impulsivity: I can't go

Short attention span: Hey, what's that?
Long attention span: Locked right in

Negative initial reaction: Don't wanna go
Positive initial reaction: Hey let's go

Low adaptability: Stay the course
High adaptability: Let's change course

High Intensity of Reaction: Crash so loud
Low Intensity of Reaction: Slip so soft

Negative mood: Feel so blue

Positive mood: Feel so good

Low regularity and predictability: Centerboard broke
High regularity and predictability: Straight and true

Chorus (together):

Raph and Hawk travelin' miles and miles
Up the river together
Logs and lightning and rocks on their way
Tambalacoque forever

High sensitivity to hearing speech: What's that talk?
Low sensitivity to hearing speech: Huh, what talk?

High sensitivity to hearing noise: What's that sound?
Low sensitivity to hearing noise: Huh, what sound?

High sensitivity to vision: What's that? See?
Low sensitivity to vision: Huh, see what?

High sensitivity to taste: What's that taste?
Low sensitivity to taste: Huh, what taste?

High sensitivity to smell: What's that smell?
Low sensitivity to smell: Huh, what smell?

High sensitivity to light touch: Feel that breeze?
Low sensitivity to light touch: Huh, what breeze?

High sensitivity deep touch: Vest too tight
Low sensitivity to deep touch: Vest too loose

High sensitivity to internal body/ physical sensations: It all hurts
Low sensitivity to internal body/ physical sensations: Nothing hurts

Chorus (together):

Raph and Hawk travelin' miles and miles
Up the river together
Logs and lightning and rocks on their way
Tambalacoque forever

Above average fine motor skills: Tie my line

Below average fine motor skills: Drop my line

Above average writing mechanics: Need my pen
Below average writing mechanics: Eraser please

Above average gross motor skills: Jump on shore
Below average gross motor skills: Ladder please

Above average oral expression: Talk it out
Below average oral expression: Don't talk out

Above average written expression: Write it out
Below average written expression: Don't write out

Above average listening skills: Got you say
Below average understanding of oral language: What you say?

Above average reading skills: Read that right
Below average understanding of written language: Can't read that

Above average visual-spatial skills: Know my way
Below average visual-spatial skills: Lost again

Above average visual art skills: Draw my boat
Below average visual art skills: Can't draw that

Above average music skills: Sing my song
Below average music skills: Can't sing that

Above average math skills: Know my miles
Below average math skills: How many miles?

Above average time awareness: Time stands still
Below average time awareness: Time flies by

Above average planning and organization skills: All ship shape
Below average planning and organization skills: What forecast?

Above average social skills: Welcome aboard
Below average social skills: Lone traveler

Above average physical and environmental health: Smooth sailing
Below average physical and environmental health: Rough water

Chorus (together):

Raph and Hawk travelin' miles and miles
Up the river together

Logs and lightning and rocks on their way
Tambalacoque forever

Your Instruction Manual Part D: *Know Your Map*

It might be easier for some of you to sum up your child's quick scan profile on a graph. And it's kind of cool to see how a QUICK SCAN graph maps out over a river. Eventually, again, this will be done for you on-line.

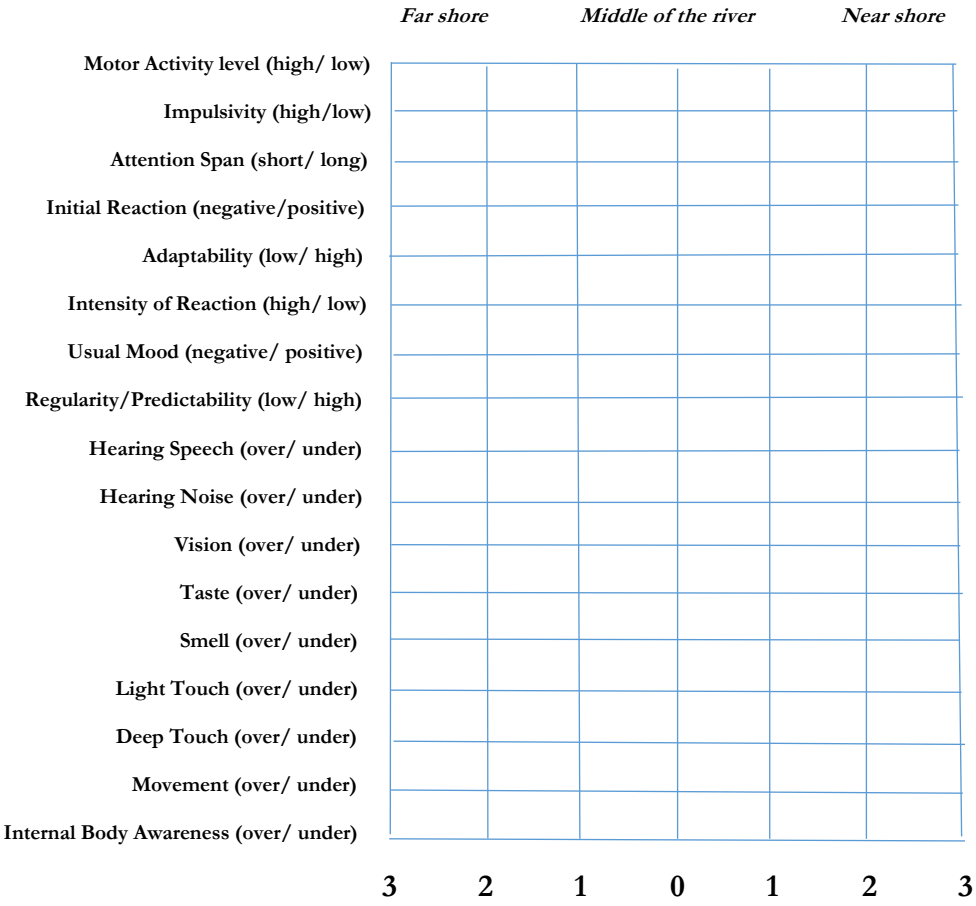
Behavioral Style and Sensory Profile: **Near-shore, mid-river or far-shore**

But for now: For behavioral style and sensory profile, go ahead and plot a point on the river map that corresponds to your child's QUICK SCAN profile. Then connect the dots and see your child's natural path appear. Does your child tend to travel along the near shore, up the middle of the river or along the far shore? Maybe your child's profile is all over the river?

With great hesitation, let me make some very imperfect generalizations about temperament and this river map. In the context of our cultural expectations, the "near shore" tends to be easier; the "far shore" more difficult; the middle of the river, not a big deal either way. This is consistent with the work of Chess, Thomas[105] and Carey[106] who made generalizations about certain temperament constellations or groupings being relatively "easy"; others more "difficult. I hesitate to label these paths up the river in such a way. As emphasized throughout Part A of the Instruction Manual, there is no such thing as a "good" or "bad" temperament; just "goodness or badness of fit" depending upon the task or situation at hand. Sometimes the near shore is harder and the far shore is easier. Truly, "You never step in the same river twice." Even so, these labels and generalizations tend to apply more often than not. And so, my river metaphor works some of the time. But that doesn't make it less fun. Go ahead. See how your child's QUICK SCAN behavioral style and sensory profile maps onto the river. Then, using a different color, you can map your own natural path onto the graph. This makes it easier to see when you and your child tend to travel together or apart.

[105] Chess and Thomas, Know Your Child
[106] William Carey, Temperament in Clinical Practice

MAPPING BEHAVIORAL STYLE AND SENSORY PROFILE



Skills (strengths and weaknesses): Fly above (sails), water level or sink below (holes)

Now, do the same thing for your child's skills profile. Plot your child's QUICK SCAN strengths and weaknesses. Then connect those dots. For which developmental domains does your child's boat tend to "fly" above the water, travel along at a normal level, or "sink" below? Most children have uneven profiles with some skills in the average range, others above and others below. Most children will have some holes that require bailing (accommodations) or patching (interventions); and some favorable winds that need catching (enrichment). As before, using a different color, plot your own skills profile on the same graph with your child's. Which of your strengths and weaknesses map along with your child's? Which of your skills are divergent?

MAPPING SKILLS PROFILE