Your Gander Instruction Manual

Your four-part Gander Instruction Manual is designed to help you better understand and remember your child's developmental profile. The Gander rating scale and Map were both presented in the First Mile of the Journey. Both are reproduced here for easy reference with a few extra twists. Staying true to the idea of different learning styles and the importance of multimodal instruction, the Gander is represented in four different ways:

- Part A: The Gander Explained
- Part B: Know Your Boat
- Part C: Know Your Song
- Part D: Know Your Map

Refer back to the First Mile of *Parent Child Journey* for more complete explanation. I recommend that you start by doing the Gander on one child. Later, you can also use the Gander on yourself, other children, and other adults. You can just do the Gander, or you can also do the boat, song, or map. Whatever works for you!

So here's the Gander, followed by each of the four parts of "Your Gander Instruction Manual."

The Gander

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 and 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

Overreports — *Symptoms of illness, not feeling well* — Underreports

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

Physical Health, Family, Environmental, and other Life Stresses

Problems with Physical Health

3 2 1 0 1 2 3

Severe Average None

Family, Environmental or Life Stresses

3 2 1 0 1 2 3

Severe Average None

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*	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*	Remarriage
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, 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
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*	_____

Your Gander Instruction Manual

Throughout the *Parent Child Journey* program, parent and child are represented as two birds, Raph and Hawk. The story of their river adventures weaves in and out of the ten-session parent training manual. In this appendix, I offer Your Gander Instruction Manual as a supplementary experiment in progress. Part A: The Gander Explained, stands on its own and should be of immediate use to the interested reader. In a straightforward way, it provides more detailed discussion of the Gander's different facets. Much less straightforward, Your Gander Instruction Manual also includes part B, a boat pictograph; part C, a birdsong; and part D, a river map. These odd modes of presentation are not for everybody. But I hope that some of you find this instruction manual experiment helpful or, at the very least, strange fun.

Your Gander Instruction Manual Part A: The Gander Explained

What it means: Some aspects of the Gander might seem complicated and confusing. Here, I will try to explain each facet of the Gander 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 Gander is just a here-and-now description and was designed to be practical.

Goodness of fit: Everybody has differences in behavioral style (Carey, 2004). Everybody has different strengths and weaknesses (Gardner, 2006). 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 you describe your child's profile, you should consider "goodness of fit"; that is, how each facet of your 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 having a Gander at your child, you can take a Gander at 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-patient fit, sibling-child fit, and so on. The point is, it's not just about the kid! Adults and other children have their own differences and challenges too. When you start overlapping a lot of Ganders, 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 Tenth Mile, there are two different kinds of strategies: accommodations and interventions. Most children with developmental differences need a combination of both. Accommodations are built on an acceptance of the child's developmental differences; interventions are about changing the child. Accommodations require some degree of dependence on 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 on empathy and common sense; interventions require expertise and science. In the Tenth 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 Gander, 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 Gander 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.

Discussion of Behavioral Style/Temperament

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

1. motor activity level
2. impulsivity
3. attention
4. initial reaction
5. adaptability
6. intensity of reaction
7. mood
8. regularity

Starting in the 1940s, Chess and Thomas (1989) 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, these infants were followed throughout childhood and into adult life. This pioneering work dispelled the old idea that babies are born a blank slate on which parents write the child's destiny. We now know that everybody is born different. Brazelton (2011) developed the Neonatal Behavioral Assessment Scale as a tool to describe such inborn 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 or the other. We are the products of our genes *and* our environment—both in dynamic interplay (Ridley, 2003).

So on the Gander, let's work through your child's behavioral style together. Check off the ratings directly on the Gander. 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 Gander 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 theater. Being a "mover" is also advantageous in unstructured settings where extra energy creates opportunities for enjoyable activity; for example, the playground or backyard. 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 child with high motor activity. 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 be relatively easy. Parents who prefer more active lifestyles can become frustrated when their children cannot keep up. It is important for such "motorically mismatched" 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 on the importance of "kinesthetic" or movement-based learning (Dennison & Dennison, 1992). 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 (Smith, 2004).

- 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 play 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 Gander—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 over time—then a diagnosis of ADHD should be considered (Barkley, 2013b). Subsequently, a trial of medication might be recommended (Wilens & Hammerness, 2016). However, medication is never the whole answer. Rather, it is part of a comprehensive management strategy including behavior management, educational care, and other psychosocial interventions (Garber, 1997).

Not all inattention is from ADHD. And not all ADHD-type symptoms are impairing enough to warrant such a diagnosis. 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 his or her normal developmental differences might not cause some challenging behaviors. The flip side of an ADHD-like profile can be just as problematic. Some children struggle because of low activity level, too much inhibition, and hyperfocusing. 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, and perhaps not enough in the present.

Goodness of fit:

- *Good for:* **High impulsivity** can be good for spontaneity, 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 greater 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.
- *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 hypermoral, 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 their children develop better self-control, adults can try—within reason—to "let kids be kids." 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 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 ensured 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 and 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: ADHD may be diagnosed when high impulsivity is significantly impairing, across settings, across people, and over time. Despite concerns about overdiagnosis 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 on it (Barkley, 2005).

On the other end of the self-control spectrum, low impulsivity can be just as significantly impairing. Excessive inhibition might indicate an anxiety disorder. Too much hesitation and self-restraint can cause distress or even paralysis. These children need help learning how 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 (Zucker, 2017).

It is interesting to note that 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 (Shapiro, 2016).

But these thoughts are offered only as interesting considerations. As with all facets of the Gander, just because high degrees of impairment can suggest specific diagnoses in some children does not mean that most 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 (Hallowell & Ratey, 1995). 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. They may hyperfocus or perseverate. They do not easily shift their focus. As discussed in the side notes that follow, 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 nonpreferred 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 Gander, 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." 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 can be good for activities or tasks that require prolonged focus. These children may be able to work well even in environments that would be distracting to others. Children who can "stick with it" 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 make it difficult to work efficiently, complete jobs well, and achieve one's true potential. 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. These children may be misunderstood. They may be accused of ignoring or being rude. They may have trouble shifting from one activity to another. It may be difficult to distract or redirect them away from undesirable feelings or activities (Attwood, 2008).
- *Parent-child fit:* Parents with short attention spans may find it difficult to pick up on their children's cues or follow through during 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, yet 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 they are capable. They may need frequent breaks while doing long or multistep tasks. By allowing short and frequent breaks, the child may return to the task more successfully. Parents can break down tasks into small, simple chunks. Instructions should not be complicated or long-winded.
    - Environmental distractions should be minimized. Use multisensory presentation or your child's preferred sensory pathways, such as visual versus 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 (Silverman, Iseman, & Jeweler, 2009).
    - 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 time, more reminders, and more feedback. Sometimes they might just need some help getting started. "I'll do one, and then you do one…good! Now I'll do one, and you do two."
    - Secret signals (such as touching the shoulder or tapping the desk) can be used to let a child know when his or her 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 offset 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 mean allowing these children to stay with an activity for longer periods. 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 a 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 (Levine, 2003).

There are at least four types of inattention:

1. *Distractible type:* As described previously, many children have difficulty with inattention because their attention spans are just too short.
2. *Perseverative type*: Also as described previously, some children hyperfocus and pay attention to one thing to the exclusion of others. They are not inattentive. They are just not focusing on the "right thing." It's just hard for them to flexibly shift away from what they prefer and attend to what's required.
3. *Task or setting-specific type:* All children have difficulty attending to difficult tasks. As described throughout the Gander, 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 or environmental stress. 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 they still cause powerful distraction. Other times anticipation of difficulties—real or merely perceived—triggers anxiety or avoidance.

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:* This pattern of attention inconsistency is not random. These children are "consistently inconsistent." How well the child is able to focus and sustain attention often depends—in a predictable way—on the task or situation at hand. Other aspects of the child's profile factor in, especially his or her Gander sensory profile and skills profile. For example, it is not unusual for a child to display a short attention span when people are talking (relative 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. Parents and teachers might assume that 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 use pejorative labels and denigrating comments, such as "lazy," "poorly motivated," or "doesn't care" (Levine, 2004). But if these children could speak for themselves, they would say, "I don't have a problem being able to pay attention some of

the time. 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: Initial reaction is about adjusting to new situations. 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 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. Children who are slow-to-warm-up may have a hard time quickly adjusting to new school situations, teachers and students. 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, naïveté, 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 careful, then quick to warm up parents might become impatient or frustrated.

Accommodations:

- Strategies to accommodate **negative initial reaction** include adjusting initial expectations and demands or 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. They should not be too discouraged by their child's initial reluctance. 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. 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 and then quickly change their minds. 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 Gander, parents often ask, "Where do I put anxiety?" After all, anxiety disorders affect at least 10 percent 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 Gander 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 subtypes and many factors at play (Rapee et al., 2008; Zucker, 2017). This heterogeneity is just as true across other diagnoses; such as so-called oppositional defiant disorder, autism, ADHD, learning differences, and sensory differences. The Gander splits apart and captures complexities of your child's profile that traditional diagnostic categories lump and lose (Cuthbert & Insel, 2013).

To demonstrate the point, let's break the anxiety box down into more meaningful Gander 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, such as 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 Gander facilitates this kind of multidimensional assessment. Successful management of anxiety depends on 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." 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 (Greenspan & Salmon, 1996).

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 be 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 "microtransitions," such as the morning routine at home or activity shifts at school. They can also struggle with "macrotransitions," 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 setbacks. 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 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 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 three decades on Robin Island—was due to his equally extraordinary adaptability (Mandela, 1995).

Inflexibility is often secondary to other aspects of your child's developmental profile. For example, children with long or 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, 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. 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 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 (Kurcinka, 2015). 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" (Cain, 2013).
- *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 underreporting 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 (Schmitt, 2005).

- *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 one another. However, successive volleys of high-intensity negative reaction and higher-intensity counterreaction 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 might have a harder time with such high-intensity children. These parents might cling to old-fashioned views, such as "good children should be 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 overreact, either positively or negatively, to their child's drama. Such children tend to provoke parents to feel helplessness or rage, leading to avoidance or counterintensity. 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, they should 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. Neither 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 his or her ears. That goes for both children and parents. Giving these children socially acceptable outlets for their high intensity is important. The bedroom, basement, and backyard are usually better suited for venting than the family room, dining room, or 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 "just move on" (Hanh, 2002).

- **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 depend only on 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 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 U.S. East coast 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 might seem relatively normal or even admirable in other cultures. Thus, 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 or her 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 that follows, 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 (Duke, Martin, & Nowicki, 1996). 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." Children with a generally **positive mood** just seem to carry a smile on their faces, even when the chips are down. 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 are 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 (Seligman, 2004).
- *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 that the most common symptom of depression in childhood is irritability, not sadness (Koplewicz, 2003).
- *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 toward 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 counternegativity, 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 or her interest and enjoyment differently, such as through their level

of attentiveness and engagement rather than the number of smiles and laughs. Parents of children with negative moods should be no less available and attentive.

Side notes: Mood is a complicated facet of your child's profile and stems from a combination of factors: genetic, environmental, and experiential. As discussed elsewhere in the *Parent Child Journey*, Seligman (2006), the father of positive psychology, traced depression in many to an unhealthy habit of negative self-talk or pessimistic explanatory style. He studied dogs, life insurance salespeople, 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. 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 *pervasive*—represent 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 to future success.

Also worth repeating here asd elsewhere, Dweck (2007) wrote about two different kinds of mind-sets. People with a "fixed" mind-set 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" mind-set 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" mind-set 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 mind-set about that. In the Seventh Mile of *Parent Child Journey*, we dive further into this important subject. In a highly individualized way, you can help your child define problems in specific and solvable terms, then practice effective problem-solving—with hope and optimism (Brooks & Goldstein, 2002).

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 it seems "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 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 (Jamison, 1996). Some people speculate that civilization would have been deprived of artistic masterpieces 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 he or she 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 overreact 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 one another when their schedules are in sync but feel 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 a lot 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.
- 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 on an overly rigid schedule will backfire. Compromise is necessary. For example, an acceptable range for bedtimes or eating times might work better than one mandatory time. A distinction can be drawn between *set bedtime* (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 moods 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 moods and make appropriate adjustments. Ideally, parents and children can see down cycles coming and make timely shifts to less demanding and stressful activities (Harvey & Penzo, 2009). During times of relative emotional stability, children 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 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, as discussed further below, most of these children have a different kind of mood disorder with a better prognosis than bipolar (Leibenluft, 2011). 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 better self-regulation and 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 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, it seemed like every child with behavioral irregularity or mood instability was being diagnosed with bipolar illness (Papolos, 2007; Wozniak et al., 1995). 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 and requires accurate diagnosis and comprehensive treatment, usually including potent medication (McClellan, Kowatch, Findling, & the Rand Work Group on Quality Issues, 2007). 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 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 (David, Uhrenholdt, Baker, Foer, & Karp, 2010).

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

Discussion of Sensory Profile

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

1. Hearing speech
2. Hearing noise
3. Vision
4. Taste
5. Smell
6. Light touch
7. Deep touch
8. Movement/body position in space
9. Internal body awareness/physical symptoms

In this section of the Gander, 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 multisensory techniques" to more specific and individualized sensory strategies (Kranowitz & Miller, 2006).

Sensory strategies always work best if integrated with an understanding of the 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 affect 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 profile have a profound impact on sensory processing. To give just one example, children with high sensory reactivity tend toward 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 toward high sensory reactivity. If they were less anxious, they would be less reactive to sensory stimuli. Keeping this interplay in mind, it may be easier to change a child's sensory reactivity by targeting other aspects of his or her developmental profile.

Directly changing a child's sensory system can be difficult (American Academy of Pediatrics, 2012). A variety of sensory therapies are touted to rewire the sensory system. Proponents of these interventions claim that they can help both oversensitive and undersensitive children toward 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? They include auditory training, eye muscle exercises, and oral therapies; brushing, pressure, spinning, and biofeedback; and other occupational/sensory integration therapies. These interventions can help some children, especially when coupled with behavioral strategies targeting specific and measurable goals. However, 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, not intervening to rewire your child's sensory profile per se.

For the Gander, 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 been divided into "deep" and "light," but I could have added other types: "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 Gander prove useful to most.

While completing this section of the Gander, keep in mind that most children are not hypersensitive, average, or undersensitive 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 undersensitive to others. For example, many children are very sensitive to visual stimuli and light touch but under-responsive to speech and deep touch. Furthermore, by "inconsistent," I mean that 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. Also, sensory profiles change over time. Many

problems with sensory reactivity get better with age. So your child's Gander 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, and so forth. 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). Just because your child *hears it* does not mean that he or she *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 that follows—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. Even in this Age of the Internet, human beings still communicate primarily by talking with one another. **High sensitivity to noise** is good for noticing important environmental cues. For example, heightened auditory registration may be lifesaving 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 nonverbal cues, such as tone of voice, inflection, or throat-clearing. They may also miss other important auditory-social signals, like bells, gongs, 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 overreact or underreact 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 their child 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 other sounds that could be disturbing. 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 (Marschark, Lang, & Albertini, 2002). Do not call to these 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 multimedia 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 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* undersensitive to speech. They can be over- *and* undersensitive to different *types* of voices; for example, low versus high-pitched. The same complexity pertains to different types of noises. The same child can be oversensitive 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 noisy classroom. The obvious solution, as discussed previously, is to turn down the background noise, turn up the foreground speech, and use nonauditory supplementary aides. All 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 Gander, we will consider sensitivity to visual stimuli in general. In the skills section of the Gander that follows, 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 from, 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 a lot 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 underreact or overreact, 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 toward visual fields that are *too* interesting, such as the window. Of course, TVs, computers, and other electronic screens might have to be turned off or put 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 toward 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 ensure 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 screenings. 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 lipreading 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 one or two 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. It was no coincidence that he stayed away from medical specialties that require excellent ability to distinguish shades of red and blue; either under a microscope or on an operating room table; such as, pathology or surgery.

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 (Ackerman, 1991). 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, or 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 and may be oblivious to warning odors. Some of these children may seek or even crave unhealthy foods, "nonfoods," 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:* There are pluses and minuses here as everywhere. Parents with high sensitivity to taste and smell might be more attuned to warning signals, or they might overreact 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. These low-sensitivity parents might also have a hard time understanding their high-sensitivity child's limited tolerance for different foods. 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 from 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 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 underreactive 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 also glue, household products, liquid paper, and automobile fluids. (Drug Enforcement Administration & US Department of Education, 2012). 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 on 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 affected by environmental, physical, and life stresses.

I have elaborated on 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 or 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

What it means: From the hair on your head to the nails on your toes, there are many different types of touch receptors that 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 and for 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 Gander is artificially limited to just light touch and deep touch.

As for other facets of the Gander, most children have a "mixed pattern" of sensory preferences. They can be oversensitive to some types of touch and undersensitive 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:

Different sensitivities to touch can have a significant impact on behavior, mood, socialization and learning.

- *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, tags, shoes and socks; bathing, haircuts, and hairbrushing; Band-Aids, 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, on the playground, or in the playroom. If the desire for deep touch is shared and safe, some roughhousing can be fun and socially connecting. (What's good for children with low sensitivity to light touch and deep touch is a problem for children with ***high sensitivities*** to the same stimuli.)
- *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. (What's a problem for children with low sensitivity to light touch and deep touch is good for children with ***high sensitivities*** to the same stimuli.)
- *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 modify hugs. 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!"

Your Gander Instruction Manual emphasizes accommodation. The preceding ten-mile *Journey* is mostly about intervention; including desensitization, limit setting and natural consequences; plus, a host of other behavioral interventions that promote self-care, flexibility, and independence. In the end, parents are encouraged to put it all together and determine the right balance of accommodation *and* intervention; acceptance *and* change.

Movement/body position in space

What it means: The inner ear sends signals to the brain about balance, 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 disorientation 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. Many childhood activities involve hurtling through space. A wide variety of sports and recreational activities require a high tolerance of positional change; 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 this source of secondary behavioral disturbances might feel frustrated. **Low sensitivity to movement** can be a problem if children engage in daredevil 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. If necessary, consider using Dramamine or Scopolamine.
- 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 and followed by playgrounds, streets, and "extreme" recreational activities. These children should not be allowed to shun appropriate safety gear and equipment. 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. 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 on which came first: the sensory reactivity or the anxiety. Accordingly, interventions would target either the "sensory brain" or the "emotional brain." 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?

I recommend steering 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 Levine would say, "There is dysfunction at the junction of the functions." So should this child see a psychotherapist *and* an occupational therapist? Perhaps. But it's better to see one professional 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 interrelated motion sickness and anxiety be accommodated or fixed? Quite simply, both. The complicated part is determining the right balance of accommodation versus 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 and then modified according to the child's progress over time. How to do this? A comprehensive, integrated, multidimensional 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 field of pediatric medicine (Schmitt, 2005). 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 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.
- *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"; 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, his or her 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 underreported. Some of these children might rupture an eardrum 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 overreact 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 crying 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 overreporters, parents and doctors may need to rely more heavily on objective data from physical exams, laboratory tests, or radiologic imaging. Adults can avoid overreacting or underreacting to the child's "drama" by carefully monitoring trends and 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 underreporting children can put themselves at increased risk. Parents should learn their child's subtle cues. For some young children, vague and minor changes in behavior or sleep pattern might be reliable indicators of ear infection. The increased risk of undetected illness should condition these parents to

err on the safe side and go 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 sensory profile—remember that these are just generalizations about predispositions and tendencies, not 100 percent reliable indicators or predictors. Parents and doctors who know a child too well should not let history bias their judgment too much. For underreporters, there might be a tendency to overcompensate with excessive assessment and unnecessary treatment. On the other hand, each time a chronic bellyacher's symptoms are too quickly dismissed—"there he goes again"—it could be the one time that he or she has a serious medical or surgical problem. 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 on our temperament and physiology, but also on our culture, experience, and conditioned behavior. 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.

Discussion of Skills Profile

In this section of the Gander, 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. This description of skills will guide individualized and effective management strategies. Also, the skills profile represents a road map to success and fulfillment.

These skill categories are artificial. Each facet of your child's skills profile exists in dynamic interplay with every other facet. Language and math affect each other, fine motor and time management affect each other, gross motor and social skills affect each other, and so on. All developmental domains are intertwined.

These important interconnections are sometimes obvious; other times they are 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. All other facets of your child's profile—including behavioral style, sensory profile, and life stresses—affect each facet of the skills profile, and vice versa. Mild weaknesses in different areas may be 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 a little trouble with writing efficiency. It might not be immediately obvious why he or she 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 Gander, your child's skills profile will change over time. Some children overcome or "outgrow" disabilities. 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 lays the foundation for social connection, positive self-image, and success.

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, as discussed in the Tenth Mile, 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 his or her disability if he or she just tries hard enough is unrealistic and insulting. Still, as emphasized by Gardner (2006) in his writings on multiple intelligences, there are "different kinds of smart." 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 he or she must be denied any measure of success.

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. 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 everyday 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 Gander 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

Let's start with motor skills.

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 (Frankenburg, Dodds, Archer, Shapiro, & Bresnick, 1992). Average ages for achieving early motor milestones can be found in any standard textbook (Illingworth, 2013; Kliegman, Stanton, St. Geme, & Schor, 2015).

Gross motor milestones

- prone
  - head up — 1 month
  - chest up — 2 months
  - up on 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
- walk (two hands held) — 10 months
- walk (one hand held) — 11 months
- walk alone (ten 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 (five 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 — 7 to 8 months
- mature pincer — 10 months
- voluntary release — 12 months
- tower of four cubes — 18 months
- tower of eight 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, judgments 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 "catlike"? What about your child's muscle tone, posture, and strength? Stamina and endurance? Ability to learn new movements and work toward 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 with 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, 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 playing 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 one another 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, at 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-care.

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 reexamine their motivation.

In public settings, bypass strategies can be employed to lessen handicaps and avoid humiliation. Bypass strategies usually require 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 destination. 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 his or her weakness. Universal accommodations, such as ramps for wheelchairs, 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, Velcro, or self-tying shoes can substitute for standard tie shoes. Here, the goal is independence in getting shoes on and off, not shoe tying per se.

- Electric toothbrushes and short haircuts can make personal hygiene less physically demanding.
- Finger paints, touch screens, or drawing software can facilitate artistic creation without requiring "a fine hand." Instead of freehand 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 two 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 (nonspeech) 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 tablets that melt in the mouth or 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:
    - keyboarding
    - dictation to a scribe or voice recognition software
    - note-takers, recording devices, teacher notes, and teacher websites
    - word prediction software
    - reduced written workload
    - oral, dramatic, or other modes of presentation
    - PowerPoint
    - 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, lightweight balls
    - For soccer, playing goalie, assistant goalie, or defense instead of midfield or forward
- Noncompetitive 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, or listening to music or audiobooks if possible).
- If your child likes sports but has gross motor difficulties, consider alternative modes of participation such as team trainer, manager, scorekeeper, statistician, or 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, to name just a few.

Side notes: Even minor lags in gross motor, fine motor, or writing skills 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 online. For example, there is no way to know about a two-month-old's walking skills, a one-year-old's ability to tie shoelaces, or a two-year-old's cursive writing. Time must pass. Over the years, as motor demands increase, inconsequential weaknesses might become significant sources of impairment and frustration. Only when expectations regarding workload and quality go up are difficulties with efficiency and endurance 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 early 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, perseverance, and the passage of time, 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. Nonverbal language—including facial expression, tone of voice, gesture, and so on—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: 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? As you work through this section, remember that different facets of language are controlled by different brain networks. So, just because you are good at speaking does not necessarily mean that you are good at listening.

For speech:

- imitates speech sounds 5 months
- combines syllables 6 months
- first words 10 months
- combines words, 2 to 3-word phrases 18 months
- names one picture 18 months
- 50 percent 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 six different body parts when asked, "Where's your____?" 18 months
- Points to four pictures, when asked "Where's the _____?" 20 months
- Understands four prepositions, four verbs, and three adjectives 3 years
- Defines seven words and gives 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. But it may be hard to know what's normal. Try comparing your child to other children his or her age. If you're not sure, ask an experienced teacher or consider consulting a speech-language pathologist. In the side notes that follow, 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 his or her own emotions, it's awfully hard to problem-solve. Instead of recognizing and accommodating these underlying language deficits, adults may assume that such secondary "noncompliant" behaviors represent willful "disobedience," "laziness," or "stupidity." Moreover, your child might not understand the connection between his or her own language weaknesses and his or her trouble meeting 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 on fluent speaking and listening skills. Imagine trying to make friends and keep friends if you were suddenly dropped off in a foreign country (Duke et al., 1996). 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 for them to understand and help each other. This can lead to misunderstanding and anger. Parent and/or child might unwittingly communicate 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 developmental age for language 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 nonverbal modes; for example, demonstration, not just pure explanation.
- If language inefficiency interferes with the child's ability to show what he or she knows, 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 he or she is 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 frustration. The longer a child just sits and stares at a blank piece of paper or struggles to speak, the more anxious he or she 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 his or her 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, picture exchange, and symbol selection can empower speech-delayed children to communicate (Bondy & Frost, 2011; Heller, 2004). A plethora of new technologies "speak for the child" when he or she touches various pictures on customized electronic app screens (Green, 2013). These alternate modes of expression do not delay language acquisition; rather, they give speech a developmental lift.
- Multiple-choice or true-false formats can help, both in casual conversation and class discussion.
- "Comic strip conversations" can help children slow down and express emotionally complicated thoughts (Gray, 1994). Using sequential panels, just like a cartoon strip, you can draw simple figures and then have your child suggest how to fill in thought or feeling bubbles. "What is he thinking now?"

For written expression problems:

- Again, extra time, adjusted workload, *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 his or her 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 (Graham & Harris, 2005). Consider graphic organizers, PowerPoint, and specialized computer software.

For problems understanding spoken language:

- 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 nonverbal communication aids: gesture, animation, pictures, charts, graphs, drama, music, demonstration, and hands-on activities (Tufte, 1997).

- If a child has a special passion—sports, video games, TV shows—relate new and difficult concepts to those familiar interests.

For problems understanding written language:

- Minimize the reading content in nonverbal tasks. For example, language-rich "everyday math" is great for some children, but language-impaired children would do better with a more traditional, pure math approach or a multi-sensory approach like Math-U-See.
- 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 he or she is 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 multistep tasks, first do it together. Your child has a better chance of understanding and remembering what he or she is supposed to do if you show versus command.
- To overcome problems with inconsistent eye-tracking, your 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. Preteach concepts and vocabulary. Prehighlight 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 emotional release and self-discovery. Our culture attaches status to skillful speaking, but family, friends, classmates, and coworkers 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 impairment in childhood, the many different types of language difficulty often go unrecognized and are misunderstood. Due to the complexity of language and communication, careful assessment must move beyond simplistic distinctions between expressive or receptive, spoken or written. Though 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 (Paul & Norbury, 2011). 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 differences in language development.

As outlined previously, **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 he or she would have liked to communicate. Children can also have **receptive and expressive nonverbal language disorders**. These social-pragmatic language problems will be discussed in detail in the section on social skills. Here, we will focus on the subtypes of **verbal language** problems.

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 is 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 (McGuinness, 1999; McGuinness & McGuinness, 1999). 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 semantic-pragmatic language difficulties are most obvious when children miss the inference or metaphor and take the meaning of idioms too literally, such as "it's raining cats and dogs" or "let's shoot for the moon." Some children have difficulty understanding that the same word can have different meanings. For example, the word "bank" can refer to rivers or money. Despite good phonological processing and production, some children can still struggle with 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; for example, "dog bites man" means something very different from "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). Many children have difficulty using and understanding pronouns. 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 on 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, it might be hard to understand discussions about 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 these 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 should include *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 (Wolf & Bowers, 1999). 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 PhD 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, 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.

Although the Gander 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 to child development than meets the eye. In fact, for every facet of the Gander, there are many more layers of analysis than I could try to cover. Beyond the Gander, expert assessment might be necessary to sufficiently understand certain aspects of your child's profile. This is especially true regarding language. Despite these limitations, I hope the Gander 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, and so on
- Recognizing the difference between geometric shapes (clear edges as made by tools) versus 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. Depth perception has a significant impact on sports performance; for example, catching or hitting a ball, or finding the right position on the court or field. 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 lifesaver 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 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 taxicab drivers described in a famous MRI study. Lucky for me, I married the right person—a very good fit—and not just for her stellar directional abilities. Plus GPS came along, granting me some independence.

One snowy winter, when I was a fourth-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 nonjudgmental, empathic, and compassionate care. From that day on, I have remained intrigued about the whole range of developmental differences.

Although I was happily dependent on 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/prekindergarten level. For years, I remained jealous of people who could sketch so naturally. But then, midcareer, 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 (Edwards, 2012). 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 (Levitin, 2007). 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 on exposure, opportunity, and positive instruction. Assessment of musical development depends on 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. Children who are relatively tone-deaf and rhythm-deaf can have a hard time fitting in with musical activities. Ironically, children with perfect pitch might feel irritated by the imperfect pitch of others. But the extraordinary range of benefits should make music exposure and music education an essential part of growing up (Sacks, 2008). 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 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 to 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 him or her away, especially if these other musical influences seem powerful, undesirable, or even dangerous.

Accommodations: Strategies to accommodate are based on 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 earplugs 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 him or her 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 or woodwinds. 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 on 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 previously, 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 on his or her 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 lives 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 (Levine, 1992). 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 five 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 nonmath areas sabotage success in math:

- Visual perception problems may cause fractions such as 41/5 to be seen as 1/45 or 4 (and) 1/5. "Figure-background deficits" can cause difficulty 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 "third, fourth, and fifth" changes the meaning of the numbers "3, 4, and 5" to mean fractions instead of whole numbers. 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 one-fourth (¼) in math.
- Auditory discrimination problems can create confusion hearing the difference between tenths/tens, hundredths/hundreds, and so on.
- 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, and 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 on 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 (Tobias, 1995). Unlike many other subjects, performance at each level of math depends on 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 the answer before called on 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 multistep 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.
- 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, use 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) as well as accounting and business career paths are wide open to those so gifted. Statistics now underlie an extraordinary range of vocations (Greenhouse, 2013). 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!

As discussed elsewhere, children who have difficulty with emotional flexibility and modulation operate on a binary system, as if the only numbers are zero and one. 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 numbers two through nine do not exist, not to mention two through ninety-nine! 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 can be the first step toward improved self-regulation. For example:

- How is your motor running (Kuypers, 2011)? 0 = off, 1 = idling, 2 = slow, 3 = medium, 4 = fast, 5 = superfast. How fast should it be running: At home? On the playground? In the classroom? At the store?
- Fear thermometer (Zucker, 2017). 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?
- Rate possible solutions (Kendall, 2007). 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 zero is where you started and one hundred is your goal, what percentage improvement do you think there's been so far?
- Behavior modification (Cooper et al., 2007). Parents and children can quantify degrees of success by using money, tokens, points, puzzle pieces, marks, marbles, and so on.
- 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 zero and ten.").

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, also include time awareness, planning, organization, and implementation (Fuster, 2015). 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 at 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 underperformance, stress, and loss of motivation (Cooper-Kahn & Dietzel, 2008). Time awareness, planning, organization, and implementation skills are also 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, 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. However, parents with good executive function skills may have difficulty understanding how hard it is for their child with poor executive function skills. 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 (Dawson & Guare, 2010). Usually, this means a high degree of parent involvement, but the planning and organization team might also include other family members, teachers, and tutors (Gordon, 2007). Children with executive dysfunction should not be admonished to just try harder (Levine, 2004). 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 falling asleep at night, the schedule should be comprehensive and detailed.

You might need to divide the day into routines, subroutines, and ministeps. 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 to go, and what to have ready each step of the way.
- *Homework routines:* At the end of the school day, teachers can check the backpack and assignment book. Parent-teacher communication should be regular and sufficiently detailed. Teachers can provide homework accommodations, such as comprehension checks, advance notice, assignment breakdown, 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.
- *Evening routines* include dinner, homework, play, family time, electronics, reading, next-day preparations, cleanup, wind-down time, bathroom, bedtime, and lights out.
- *Family-social planning:* Family, social, 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 sticky 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, and so on. Whether preparing for work or play, parents and teachers should 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. Once these skills are mastered, adults can gradually withdraw their support.

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 *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 skills deficits, accommodation is never enough. If you only accommodate without correcting skills deficits, your child will become more dependent and poorly equipped to make his or her way in the world (Levine, 2006).

So why, throughout Your Gander Instruction Manual, is there such an emphasis on accommodation? Quite simply, accommodation is quick. Skill building takes time. Until your child's abilities improve sufficiently, accommodation will be necessary. While your child gradually works toward 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 even beyond thirty years of age (Giedd et al., 1999). Remember: your child will not be a fully formed adult on the day of graduation from high school. Think for a moment about the maturational difference between most twenty- and thirty-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 (Goleman, 2007). Some children have primary deficits in social development, such as autism. Other children have social delays secondary to differences in behavioral style, such as attention deficits, impulsivity, inflexibility, high intensity of reaction, and sensory hyperreactivity. 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 function. 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 lifelong. Here are some average ages for early social milestones:

- Smile responsively at one month
- First wave bye-bye, play pat-a-cake and indicate wants at eight months
- First imitate another person and play ball back and forth at ten months
- Point to share interest at twelve months
- First "help" in the house at fourteen months

- Feed a doll at seventeen months
- Engage in simple symbolic and imaginary play by twenty months
- Share and take turns by twenty-four months
- Play board or card games by thirty-six months
- Complicated dramatic play with plots and emotional themes by thirty-six 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 nonverbal 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 at solving interpersonal conflicts. They show sympathy and come to the aid of social outliers. They feel good about their social life.

Children with weak social skills are relatively "mind blind" or "context blind" (Baron-Cohen, Cosmides, & Tooby, 1997; Vermeulen, 2012). 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 nonverbal 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 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 (Lavoie, Reiner, Reiner, & Levine, 2006).

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. Academic 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 test performance to group discussion, collaborative learning, and joint problem-solving. Study after study demonstrates that school success—and future success in the workplace—depends on 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, but rather by 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 on social awareness, social skills, and self-regulation.

- *Parent-child fit:* Parents who have problems with social awareness, self-awareness, and social skills 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 coparent, other family members, health professionals, teachers, or other parents. Parents with strong social skills are usually more comfortable setting an example for their children at home and advocating for them across settings. However, such parents might take it personally or feel frustrated if their socially unskillful child does inappropriate things. It may be hard to remember that their child's social skills deficits do not indicate a personality disorder.

Accommodations:

There are many ways to help your child develop social skills. However, on the playground and in the playroom, most children with social skills deficits depend on 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 on 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 sixth-grade reading material to a dyslexic child who can only read at the second-grade level. Likewise, we need to choreograph and modify the interpersonal experience of socially delayed children to match their developmental readiness (Winner, 2016). 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, he or she 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 simultaneously interact with peers and experience new things. This social multitasking 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, comic-book conversations, social scripts, rule reviews, guided practice, and role-plays (Gray, 2015; Gray, 2016). All these techniques can help socially awkward children anticipate interpersonal expectations and complexities.

- *Competence and interest:* For children with social skill deficits, social success is more likely if they are operating in areas 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'" social status and self-image (Gladwell, 2008).
- *Play skills:* Children need plenty of play opportunities that are well matched to their play skills (Lifter, Suzler-Azaroff, Anderson, & Cowdery, 1993). 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. For children with social delays, such age-mismatched play partners are often 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. And that's ok.
- *Group size:* The larger the group size, the greater the social complexity. Social stress can increase with a larger number of play partners. Children with limited social skills should have limited social demands. If two's company, three might be a crowd. Before children can be successful one on two, they should be consistently successfully one on one.
- *Time:* Playtimes 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 fifteen 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. He or she will do better just "jumping into the deep end" and 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, and similarly between their thoughts and feelings. Over the years, they need to be coached out of a self-absorbed mind-set toward other-awareness and true interpersonal reciprocity (Winner, 2007). 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) (Attwood, 2008). 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 if he or she looks beyond your 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 importance of relationships for a happy and healthy existence. However, many of history's most admired and important individuals were not at all socially successful (Silberman & Sacks, 2015). Thanks largely to the growing importance of physics, science, computers, and the Internet, a relatively isolated existence is no longer synonymous with failure (Prizant & Fields-Meyer, 2016). To quote Temple Grandin (D. Shapiro, personal communication, 2002), the most famous autistic person in the world: "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." The autism pride and neurodiversity movements are based on the idea that our society needs to expand its narrow idea of success and meaning (Donvan & Zucker, 2016). 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 judgment 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 wheelchair, 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 and 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 (Shapiro, 1994). 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 Gander Life Stresses checklist includes a wide range of such challenges. Health problems include hospitalizations, surgeries, physical or mental illnesses, disabilities, injuries, and allergies; in the child, family members, or significant others. Many parents, struggling with the stress of raising a challenging child, experience 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 overscheduling and playground conflicts to poverty and tragedy, a child's behavior problems can be amplified or caused by a broad range of real-world hardships (Elkind, 2006; Greenspan & Salmon, 1994; Kotlowitz, 1992). 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 the 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 factors actually turn on and off different genes (Ridley, 2003). 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 his or her 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 *Parent Child Journey*, especially the Second and Ninth Miles, I emphasize the importance of 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; schoolteachers, counselors, and administrators; mental health providers, religious organizations, social services, and government agencies; support groups and online communities; and 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 (Development, 2000). The study of the brain has yielded groundbreaking 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 and so falls short of providing the kind of help people really need (Khoury, Evans, & Burke, 2010; Mukherjee, 2016).

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 extraneurologic perspective: family systems theory (Papero, 1990).

No matter what kind of brain your child has, family relationships matter (Nichols, 2013). Family connections are usually lifelong, interactive, dynamic, and deep. These intimate interpersonal forces exert 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 (Napier & Whitaker, 1988). For some families, conflicts can be deep and frequent. There can be rivalry for attention, love, and approval. This can take the form of teasing, insulting, competition, and aggression. Family turmoil can cause 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: "indifferent," "distant," "estranged," "conflicted," "harmonious," "close," "friendly," "loving," "hostile," "violent," "abusive," "manipulative," "controlling," "admiring," and so on (McGoldrick, Gerson, & Shellenberger, 1999). 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 his or her 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., stomachaches) 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 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 Gander 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 Gander 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.

Your Gander Instruction Manual: Parts B, C, and D

And now for something completely different. So far, I have presented the Gander 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 multimodal treatments of the Gander. I've offered some suggestions, but please use your own creativity and imagination. And thanks for contacting me directly to share what you've done and offer any suggestions for further development.

Your Gander Instruction Manual Part B: Know Your Boat

You and your child might choose to draw your own Gander picture. As you complete the Gander, feel free to have some fun creating a metaphorical picture. Start with a rough outline of Raph's (your child's) boat. Outline Raph's (your child's) body and head in the boat. Then, according to the suggestions that follow, add different parts to the boat and Raph. Better yet, exercise your own creativity and make up your own boat and parts. Do not draw every feature listed. Rather, choose to picture only those aspects of the Gander that are most important; meaning the key features of your child's profile. Here are some ideas:

- ***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 no anchor at the end of the rope at all! Children with low impulsivity act as if the anchor for their boat is too big.
- ***Attention span:*** Children with short attention spans 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 around and around 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 centerboard and rudder. Their boat tracks steady and handles true. Children with low regularity and predictability act is if their centerboard 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 megaphone on one ear. Children with high sensitivity to noise act as if they have an 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 noise-cancelling headphones. 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 or sunglasses.

- ***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 as if they have a big nose. Children with low sensitivity to taste act as if they have a little tongue. Children with low sensitivity to smell act as 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 eight-armed hugging octopus. Children with low sensitivity to light touch act as if they have 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 have a big needle sticking into their tummies. Children with low sensitivity to internal body sensations act as if they wear a protective vest.
- ***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 act as if they have 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 a clock (time) stands still. Children with below-average time awareness act as if a clock (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 they have a boat full of people. Children with below-average social skill act as if they are alone in their boat.
- ***Physical/environmental health:*** For children with above-average physical and environmental health, it seems as if the sun is always shining and water is always smooth. For children with below-average physical and environmental health, it's like the sky is full of dark clouds and the water is rough.

Your Gander Instruction Manual Part C: Know Your Song

"Raph's Song" (child) and "Hawk's Song" (parent): One day Your Gander Instruction Manual might go online. Then, a song could be written and played for you as you complete the Gander. But for now, those of you who are musically inclined can give it a try. Pick your own melody—perhaps, "Row, Row, Row Your Boat." Make up your own words.

Music: My version of Raph's and Hawk's songs represent variations on a simple melody I wrote as a teenager. Hawk's soaring melody starts a perfect fifth above the earthbound Raph's. Then, for each developmental domain, the melody in each of my songs moves up or down, depending on Gander individual differences. Also, Hawk's song moves to the long and graceful 4/4 beat of his wings. Raph's song moves in shorter beats and more incremental 6/8 time. In this way, both songs are melodically and rhythmically intertwined. Although Hawk's and Raph's songs may be different, they can still be sung together in beautiful harmony. This actually works! For a musical sample, go to Raph's Song and Hawk's Song.

Words: Don't write a verse for every facet of the Gander, just the most important ones. First write lyrics to sum up your child's profile in song. Then do your own. Riffing on the *Tale of Raph and Hawk* in *Parent Child Journey,* here's what I came up with.

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's all pain
Low sensitivity to internal body/physical sensations: Feel no pain

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 shipshape
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 sailing

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

Your Gander Instruction Manual Part D: Know Your Map

It might be easier for some of you to sum up your child's Gander profile on a graph. And it's kind of cool to see how a Gander graph maps out over a river—for both your child and for you. *For ease of use, I repeat the following presentation of the river map in both the First Mile of the Journey and as part D of* Your Gander Instruction Manual.

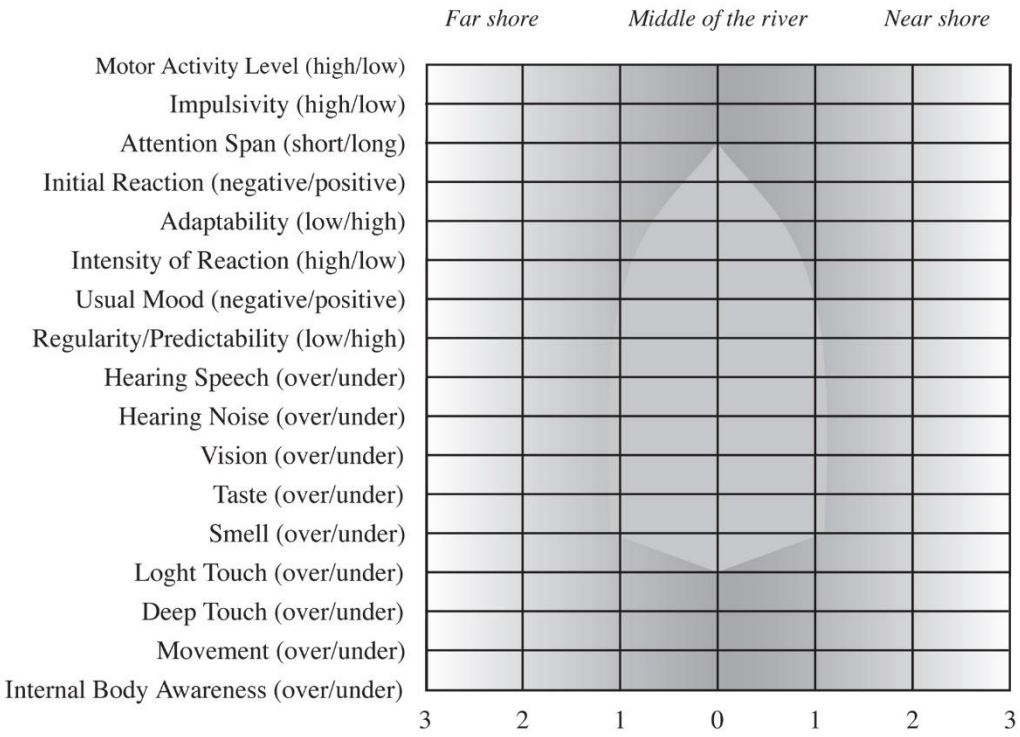
Behavioral Style and Sensory Profile
Near shore, midriver, or far shore

For behavioral style and sensory profile, go ahead and plot points on the river map that correspond to each facet of your child's Gander profile. Then connect the dots and see your child's natural path through the water. 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 and Thomas (1989), who made generalizations about certain temperament constellations or groupings being relatively "easy" and others more "difficult." Although often helpful, labeling these personality types or river paths in such a way will not be accurate for all children in all situations. As emphasized throughout part A of the Your Gander Instruction Manual, there is no such thing as a "good" or "bad" temperament, just "goodness or badness of fit," depending on the task or situation at hand. Sometimes the "near shore" is harder and the "far shore" is easier. Even so, I offer these labels and generalizations because they tend to apply more often than not. Whatever your child's differences in temperament, it's up to you to decide when that behavioral style represents an advantage (near shore) or a disadvantage (far shore).

Staying mindful of this warning against generalizations, go ahead. See how your child's Gander behavioral style and sensory profile maps onto the river. Then, if you like, use a different color to map your own natural path onto the same graph. This makes it easier to see when you and your child tend to travel together or apart.

MAPPING BEHAVIORAL STYLE AND SENSORY PROFILE



Skills (Strengths and Weaknesses)
Fly above water level (sails) or sink below (holes)

Now do the same thing for your child's skills profile. Plot your child's Gander 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 water level, or "sink" below? (See the Tenth Mile for more detailed discussion of strengths and weaknesses.) Most children have uneven profiles, with some skills in the average range, others above, and others below. Most children will have some weaknesses—"holes in their boats"—that require bailing (accommodations) or patching (interventions), but also some strengths—"sails"—for catching favorable winds (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 different from each other?