

Minding Your Baby's Mind

By Christin Taylor

DR. JOHN MEDINA SHARES HIS RULES FOR RAISING A SMART AND HAPPY CHILD

■ Every time molecular biologist John Medina taught parents about their babies' brains, he noticed something interesting: They didn't seem to care. "Even though I was talking about cells and molecules, I would get the same five questions every time," Medina says, listing them:

1. How do I get my kid into Harvard?
2. Does my baby have an active mental life in the womb?
3. What's parenting going to do to my marriage?
4. How do I raise a happy child?
5. How do I make a moral child?

Parents might be surprised to learn there's a neuroscience behind each of these questions. Thus was the birth of Medina's new book, *Brain Rules for Baby: How to Raise a Smart and Happy Child from Zero to Five* (Pear Press, 2010). "I wanted to make this book organized around those heartfelt, insightful and good questions that people are asking but no one's addressing," says the author, who uses science to answer these questions and to dismiss some myths about parenting.

"The great thing about science is that it takes no sides—and no prisoners," says Medina. "Once you know which research to trust, the big picture emerges and myths fade away."

Myth #1: Playing Mozart to your womb will improve your baby's future math scores.

The truth? Leave your fetus alone, says Medina.

"Morning sickness is legendary for nausea, but it also makes you so doggone tired, you don't want to move. The baby is going, 'Good, good. I'm spitting out 8,000 cells per second. I need time to concentrate, thank you.' "

If you want your child to do well in math, the greatest thing you can do is teach your little one impulse control, writes Medina. Citing results of a study by researcher Walter Mischel, Medina explains how children who could delay gratification for 15 minutes scored 210 points higher on their SATs than children who could only last one minute.

Myth #2: To boost their brain power, children need French lessons by age 3, a room piled with brain-friendly toys and a library of educational DVDs.

The truth? Medina says that if your toddler's brain could talk, it would say, "Quit buying me electronic gadgets. I need lots of open-ended play. I need cardboard boxes, and crayons, and two hours. I don't need flash cards. If you really want to improve my cognitive development, talk to me, say words to me. Interact with me. Understand my behavioral cues."

Medina cites the work of Ed Tronick, who, for decades, has been studying the emotional lives of children and the way their parents interact with them. Tronick coined the phrase *interaction synchrony*, which Medina defines as knowing your babies' cues, when you're over-stimulating them and when you need to be with them.

The worst thing possible for your toddler's growing mind, Medina says, is your flat-screen TV. He advises parents to create a "chocolate factory" in their homes for their toddlers— a room built for your toddler's growing brain (based on Willy Wonka's chocolate plant). Every playroom should include the following elements:

- Lots of choices
- A place for drawing
- A place for painting
- Musical instruments
- A wardrobe filled with costumes
- Blocks
- Picture books
- Tubes and gears

"Anything where a child can be safely let loose, joyously free to explore whatever catches her fancy," he explains.

Myth #3: Continually telling your children they are smart will boost their confidence.

The truth? Medina voices the impact of such a myth on a kindergartener's mind: "If you are going to praise me for my intellectual accomplishment, don't tell me I'm smart. It's toxic for me to hear that." Medina cites the work of Carol Dweck, a Stanford scholar and researcher, who used the term *fixed mindset praise* to describe the way parents may inadvertently clip their child's intellectual stamina in the bud.

"Little Johnny gets an A," Medina explains. "A fixed mindset praise says, 'Oh Johnny, you got an A on the test. I am so proud of you. You are so smart.'" Knowing that mom and dad are happy with him when he gets an A is like a "dopamine lollipop" for little Johnny, says Medina. Thus, when he gets a C, Johnny believes this means he's not smart. It becomes a personal failure, upon which he fixates over and over.

"Johnny's depth of understanding is pretty limited," says Medina. "He's interested in pleasing an authority figure. And children raised with fixed mindset praise don't get very good grades, even if they are smart. If they get to Harvard, they collapse under the weight of the intellectually robust environment."

If you want your child to do well in Harvard and other intellectually rigorous schools, Medina says, use *growth mindset praise*: "Oh Johnny, I'm so proud of you. You must

have studied really hard.” As Medina explains it, “Now you’re appealing to intellectual grease, not horsepower.”

Parents who praise their kids’ efforts, not achievements, raise children who love running into problems. “They are so happy to get a challenge. If they get a C, they feel like they have control over it,” Medina says. “They say to themselves, ‘I didn’t study hard enough.’ Not, ‘This is a personal failing.’”

According to Medina, kids raised with growth mindset praise are focused, tenacious and don’t take failure personally.

Nature vs. Nurture/ Seeds and Soil

True to his quest to cover parent’s practical questions, Medina organizes his book around the genetics of a baby’s brain and the sociological impact parenting has on it. As a result, the brain rules cover both hard science (“The brain cares about survival before learning”; “Intelligence is more than IQ”; “Babies are born with their own temperament”) and practical parenting advice backed by research (“Praise effort, not IQ”; “Empathy soothes the nerves”; “Discipline + warm heart = moral kid”).

Medina does this because he believes that nature and nurture are intimately joined in babies’ brain development. He calls the genetics *seeds*, and the social influence soil.

“Seeds are the DNA. I have an XY complement and you have an XX complement, and there’s DNA in them thar hills. Then the seed has to be planted in soil, and then it has to grow up. If you have great seeds and great soil, you’re going to get a good one.”

For this reason, Medina dedicates a whole chapter to marriage and helping partners navigate the brutal effects of new parenthood on their relationship. Parents should not be surprised to discover that there is neuroscience to back this up, too.

Happy Marriage, Happy Baby

Medina says there are a couple of “big fat reasons” why he dedicates so much time to helping parents not fight:

1. “Kids can pick up on it. And infants can rewire their nervous system (it’s called a compensatory response), and that rewiring puts them on a heightened state of alert.”
2. When exposed to a “huge amount of fighting and no resolution, kids get infectious diseases, they are more prone to get pediatric anxiety and depressive disorders, and they show, in later years, no real loyalty to parents. In fact, some grow up to be *rescuer children*”—children who become their parent’s confidant. “That’s toxic,” he says.

So is there hope for kids exposed to fighting?

Medina says yes, there’s a way around these detrimental outcomes. Parents need to add a second ingredient to their fighting: resolution.

“The research is clear. It’s not the presence of fighting that matters, and it does not hurt our kids’ brains, but...after you’re finished fighting, you also have to resolve in front of your children.” Parents may go off and resolve their conflict in private, but Medina says that’s not enough. The key is to make up with your partner in public, in front of the children. “If a kid sees mommy and daddy fight and the next day sees them okay, he’s

thinking, ‘Huh? Weren’t they fighting?’ If they see you resolve emotionally and verbally, the kid has a chance to learn that a) fighting is okay, and b) here is how you resolve it.”

If children never see their parents resolve the fight, Medina says an asymmetry develops—all fighting, no making nice—and the presence of that asymmetry is devastating.

The Power of Empathy

When faced with a strong emotion from your spouse or your children, Medina tells parents to turn to empathy first.

1. “Describe the emotion you think you see.”
2. “Make a guess as to where it came from.”

By learning how to empathize with your partner as well as your little ones, you will teach your toddler and preschooler, through example, how to empathize with others around them. Children who learn to step outside of themselves in order to understand another person’s feelings are better able to control their own impulses, thus leading to higher SAT scores years down the road. And children who are able to empathize with playmates make better friends. Medina cites the landmark Harvard study of adult development to show that friendships are the single best predictor of a child’s happiness as they grow up.

Empathy not only has the power to stabilize marriages, but also the power to shape your child’s intelligence and happiness.

Children are Human Beings

Ultimately, Medina would like parents to understand one thing about their baby. “A child is a real live human being from the get-go, not your merit badge. They are not a personal reflection of your intelligence or the success of your life. They are little people, who need to be treated as people...That’s why I wrote the book.” **[bw]**