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HOW ADHD ISSUES CAN BE CAUSED BY PRIMITIVE REFLEXES

For parents of children with attention deficit or attention deficit hyperactivity disorder, one question might wander through their minds occasionally:

“Is my child hard-wired to not pay attention in school?”

For some parents, the answer might actually be **yes**.

The root of the answer is found in **primitive reflexes**, many of which develop *prior to birth*. See, primitive reflexes are found in infants and toddlers, and they exist as survival mechanisms (or remnants of survival mechanisms). Adolescents, teenagers, and even adults can have them too—often as the result of developmental issues or traumatic brain injury.

Primitive reflexes that reappear later in life are called “frontal release signs,” as they result from damage to or improper development of the frontal lobe. There are 14 different primitive reflexes currently being observed in humans, but in today’s blog we will discuss the 4 that affect your child’s classroom performance.

Each of the following reflexes develop while the baby is in the uterus, and should be integrated at 9-11 months of age. More importantly, each of the following reflexes have implications for your child’s school performance if they do not integrate properly.

THE PALMAR/GRASP REFLEX

The palmar response is the reflex that causes a baby to grasp objects in contact with him or her. Researchers believe this reflex exists to facilitate mother-child bonding as



him or her. Researchers believe this reflex exists to facilitate mother-child bonding, as babies will most commonly grab their mother's hand as she holds them.

Because infants lack the cognitive ability to deliberately grab objects, scientists know the grasp response to be *areflex*. It helps infants develop proprioceptive (or joint) feedback, which allows the brain to further develop. It also allows for the development of hand-eye coordination.

How It Affects School Performance

When the palmar reflex persists, it can affect a child's ability to grasp writing tools. For example, they might grip a pen with their whole fist rather than the thumb and index finger. This results in slower, less legible handwriting, poor hand-eye coordination, clumsiness, all which in turn can lead to lower participation and self-esteem.

THE SPINAL GALANT REFLEX

This reflex exists to help infants move through the birth canal. Essentially, the reflex causes the baby to contract and twist their body in response to contact with their spine. The idea is that as the baby moves through the mother's pelvis, pubic bone contact with the infant's back will cause them to twist and contract to travel more quickly.

You can watch this reflex in newborns: simply gently run your fingernail down the side of their spine from the middle of their back to the base of their spine. The Spinal Galant reflex will cause the child to squirm toward the side you're touching.

How It Affects School Performance

If your child retains the Spinal Galant response, they will have a difficult time sitting still. Sitting in a chair, with constant contact with the chair back, will cause them discomfort and they'll squirm in response. As a result, they'll have a hard time sitting still and focusing. This can even apply when children wear tight shirts or belts.

FORWARD SYMMETRICAL TONIC NECK RESPONSE

This reflex causes an infant to tuck their chin and flex their arms and legs—it's thought to help infants maintain the fetal position.

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How It Affects School Performance

When this reflex persists, it causes children to slouch or rest their heads on their desks, and commonly wrap their feet around the legs of their chair. It results in poor extensor tone, which has a significant second effect:

It leads to delayed development in an important part of their brain called the reticular activating system.

The reticular activating system is the part of the brain that “activates” the whole brain, and it’s responsible to releasing dopamine—a vital hormone for learning. Children with this primitive response will appear as though they aren’t paying attention or will often “zone out.” They’ll have difficulty focusing on their schoolwork, to say the least.

THE MORO RESPONSE

The Moro response is derived from a fear-paralysis response, which develops from conception and turns into the Moro response right before birth. This reflex is a “startle response,” so it’s triggered by a sudden stimulus.

You can see this reflex in action when babies are startled: their arms and legs will flail, they’ll take a deep breath, and they’ll cry loudly.

Neuroscientists believe this reflex originated when humans in the wild would respond to predators by flailing their arms and yelling in order to scare them away. If this response persists, it makes your child very easily distracted and easily startled. They’re sound-sensitive, touch-sensitive, smell-sensitive, light-sensitive, and in general always on high alert—this makes it incredibly difficult for them to concentrate.

For those with persistent Moro response in a busy classroom, every small stimulus can derail their focus.

HOW OUR FUNCTIONAL NEUROLOGISTS CAN HELP

When reflexes do not integrate properly or persist longer than they should, it indicates that your child has a developmental challenge or delay. The best way to

confirm if this is the case is to receive a full examination from a functional neurologist.

At Plasticity Brain Centers, our staff help our young patients with a comprehensive exam and a primitive reflex analysis. If we find that a child has a developmental challenge, we create a regimen of exercises designed and proven to help them properly integrate primitive reflexes.

Based in a ReceptorBased® treatment paradigm, our exercises utilize sensory input and highly specific movements in order to restore proper brain function. If you want to know if this program is appropriate for your child, give us a call to speak with our admissions manager. If your child matches the above symptoms, we may be able to help them do better in school and regain focus and function.

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