



PRIMITIVE *Reflexes*

By Clare Crew



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AN INTRODUCTORY GUIDE TO CHILDREN'S PRIMITIVE REFLEXES

By Clare Crew

Hello there!

If you're reading this eBook about primitive reflexes, you're clearly interested in child development. Perhaps you're a Mum, a Dad or an Educator. Or maybe you're a Grandparent, Aunt or concerned friend.

Put simply, you have a child in your life who is struggling. He may have a diagnosed developmental condition such as Autism Spectrum Disorder (ASD), Speech Delay, Sensory Processing Disorder (SPD), or Attention Deficit Hyperactivity Disorder (ADHD).

Perhaps there's no label but still obvious challenges. She may be easily distracted, tire easily, be falling behind with school work, have emotional outbursts, be plagued by anxiety, or appear physically and socially clumsy. And you? You're likely to be pulling out your hair or rocking in the corner. On the one hand you can see so many amazing qualities within this child and yet on the other, you just aren't sure how to reach them.

You may have been actively searching for answers and come up empty handed. Or perhaps you've been politely reassured by others that all is well. That they will magically 'grow out of it'.

In this eBook, you'll find the answers you've been searching for-the underlying cause of why so many children are struggling to meet our expectations. And from this place of understanding, you can pave the way forward in creating positive change for the little ones in your life.



SO WHAT ARE PRIMITIVE REFLEXES ANYWAY?

Primitive reflexes are the foundation for a child's development. They are the involuntary wiggly movements that a newborn baby makes in response to specific stimulation. They develop while the baby is in utero and are controlled by the brain stem.

Primitive reflexes serve three functions:

1. We have them to assist our movement through the birth canal
2. We have them to protect us and aid our survival in those earliest of weeks
3. They provide the body with essential sensory-motor stimulation for the initiation of higher brain functioning

The important thing to highlight about primitive reflexes is that they come with a use by date. They are so crucial in our first 6 months of life but beyond that, these reflexes restrict our further growth and development.

Areas of potential challenge

Those with poor reflex integration may have lifelong problems with:

- Learning
- Attention
- Behaviour
- Coordination
- Emotional wellbeing
- Optimal body function (like digestion or fertility)

The process of integration

The first year of life is a time when primitive reflexes are 'used up' or integrated. And the way that this process naturally unfolds is through movement.

Babies know this, it is why they wriggle and squirm even before beginning to display voluntary movement patterns like rolling and crawling. Toddlers know this, it is why they walk, run and climb at every opportunity. Children with developmental hiccups know this, it is how they earn the title of hyperactive, it is why they are constantly in motion, even when you tell them to sit still.



SO WHAT ARE PRIMITIVE REFLEXES ANYWAY?

Being wired for movement is nature's way of integrating the reflexes and initiating the development of neural pathways in higher centres of the brain. Without interference from us, this process occurs naturally and is virtually invisible.

You may like to think of the primitive reflexes as a computer game that we are all born with. As we learn each new baby movement, we complete the next level. When all of the reflexes have been used up by rolling, rocking and crawling, the computer game is finished. Mission complete!

For some children though, the primitive reflexes stay for much longer than intended. It could be because an important milestone was missed or just not done for long enough. Or perhaps there were complications in pregnancy or birth. What this means is that the computer game is still running in the background, draining resources.

On the following pages you'll find information about specific reflexes, their essential role for babies and also the challenges that can eventuate when they remain.

MORO REFLEX

The Moro reflex is easily spotted in a newborn baby. Any sudden change of sensory stimulus (movement, bright light, loud noise, temperature) results in the arms flying out the side, there's a sharp intake of breath, adrenalin and cortisol are released into the bloodstream and of course we hear a big loud cry.

A retained Moro reflex is one of the easiest to spot, as it's one of the hardest to live with. Hypersensitive senses remain in the individual and aside from the arm movement and cry, the body reacts in the same way. This means that the individual is in a constant state of fight or flight; digestion, fertility, maintaining adequate attention levels...it all becomes secondary. These children need structure, and ideally want to be calling the shots themselves. When things change at the last minute, an angry or emotional meltdown is likely to follow.

MORO IN A NUTSHELL:

- Hypersensitive senses (for example, dislikes loud noises, tires easily under fluorescent lighting)
- Motion sickness
- Angry/emotional outbursts
- Poor balance and coordination



MORO IN A NUTSHELL:

- Low energy levels
- Poor digestion
- Poor adaptability
- Hyperactivity
- Auditory Processing Disorder
- Difficulties with reading and writing
- Adrenal fatigue
- Emotional and social immaturity
- Allergies, intolerances and asthma

ASYMMETRICAL TONIC NECK REFLEX (ATNR)

The ATNR provides early training in eye-hand coordination. When a baby turns its head to one side, the arm and leg on that side stretch out, while those of the other side of the body remain bent. When the head turns in the opposite direction, the extended arm and leg changes to match. If you have this reflex after the age of six months, your arms still want to move in response to the turning of your head.

Riding a bike or car can be challenging for this very reason (I looked at the house on my left and whoops, I rode into their fence!). You may be able to overcome this tendency but have very tight shoulders as a result. Visual processing challenges are common due to the incomplete phase of eye hand coordination training. In fact, Dyslexia is a common condition in those who have a retained ATNR.

ATNR IN A NUTSHELL:

- Motion sickness
- Significant difficulties with reading, writing, spelling and listening (such as that related to Dyslexia)
- Difficulties with maths
- Poor handwriting
- Difficulty crossing the midline
- Poor eye-hand coordination
- Confused handedness (neither left nor right handed)



TONIC LABYRINTHINE REFLEX (TLR)

The TLR connects movement of the head with that of the body. When a baby's head moves forward, so too does the body, curling into a fetal position. When the head moves back, the body arches at the spine. This reflex is extremely important for helping a baby to gain control of the head and neck.

When kept beyond babyhood, challenges may exist with balance, eye tracking, auditory processing and muscle tone. This is because correct alignment of the head is essential for each of these processes to work well (and when they don't unfortunately our ability to be focussed and pay attention is compromised).

A retained TLR is very common in babies who have not had enough tummy time (we have to 'use up' the reflex before it leaves us alone!).

TLR IN A NUTSHELL:

- Poor balance and coordination
- Hunched posture
- Low muscle tone
- Motion sickness
- Difficulties with eye tracking
- Poor auditory processing
- Lack of focus and attention
- Tip toe walking
- Poor spatial awareness and orientation
- Tendency to be cross eyed



SYMMETRICAL TONIC NECK REFLEX (STNR)

If you want to get technical, the STNR is not a primitive reflex because it's not present at birth. Instead it is transitional, developing between six to nine months of age. The purpose of this reflex is to get us into a hands and knees position in preparation for crawling. When the baby's head looks forward or up, the arms are straight and the legs bent (the crawling position) but when the head looks down the arms bend and the legs straighten (ker-splat!). Rocking backwards and forwards is the instinctive way that babies integrate this reflex. If still active, crawling will either look quirky or not take place at all (hello bum shuffler!).

An unintegrated STNR means that movement of the head is still automatically linked to movement of the arms and legs. School work becomes effortful and difficult, particularly in the areas of reading, writing and comprehension. Posture is awkward, headaches are frequent, vision disorders are common and swimming above water sure is tough.

STNR IN A NUTSHELL:

- Problems sitting still
- Struggle to remain on task
- Headaches caused by tension in the neck
- Visual processing challenges
- Reading and writing difficulties
- Hunched posture
- W sitting
- Tendency to become short sighted (especially in our STNR bookworms)



SPINAL GALANT REFLEX

The Spinal Galant Reflex is an important one for helping the baby's journey down the birth canal. When activated, hip rotation can be seen in correspondence with stimulation of the spine.

Children with this retained reflex often appear to have ants in their pants. They are constantly fidgeting and without the freedom to do so, concentration is a challenge

These individuals may dislike tight clothing around their waist (as it can activate the reflex) and tend to sit on the edge of their chair for the same reason. Many children who wet the bed after the age of 5 are found to have a retained Spinal Galant Reflex.

SPINAL GALANT IN A NUTSHELL:

- 'Ants in pants'
- Attention difficulties
- Dislike clothing around waist
- Poor short term memory
- Poor coordination
- Hip rotation to one side/scoliosis
- Bed wetting after 5 years of age



THE ROOTING REFLEX

The Rooting Reflex helps an infant to locate the breast and prepare for attachment. When the cheek is stroked, the head turns and the mouth opens. It essentially connects the infant with nourishment and survival.

Children who still have this reflex are often spotted with an open mouth during times of concentration (for example when catching a ball, playing a computer game or cutting with scissors). They are prone to speech and articulation problems and with

prolonged sensitivity in and around the mouth, they often avoid eating textured foods. Gagging during teeth brushing can also be common.

ROOTING REFLEX IN A NUTSHELL:

- Speech & articulation problems
- Sensitivity in and around mouth
- Avoidance of textured foods
- Dribbling beyond babyhood
- Open mouth when concentrating
- Hormonal imbalances



JUVENILE SUCKING REFLEX

Once attachment to the breast has taken place, the Juvenile Sucking Reflex works to stimulate the letdown of milk. To replicate the action of this reflex, move your tongue from the back of your mouth to the front (throat to teeth) several times.

Beyond babyhood, this reflex should evolve into the Adult Sucking Reflex, whereby our tongue moves from the front of our mouth to the back. This helps us to swallow liquids and food as well as to pronounce specific speech sounds clearly.

It makes sense that a child with a retained Juvenile Sucking Reflex may have a speech delay-their tongue is moving in the wrong direction! Lisps are especially common. Without a strong swallow pattern (which comes from the adult version of the reflex) ear infections are also likely, due to inadequate pressurisation of the eustachian tubes (bacteria LOVE this).

Still need another indicator? These children are easily spotted when in concentration mode, as their tongue sneaks out of their mouth to say hello!

JUVENILE SUCKING IN A NUTSHELL:

- Speech delay
- Swallowing and chewing problems
- Frequent ear infections
- A lisp
- Continued need to suck (such as their thumb or clothing)
- Involuntary tongue movements when writing or drawing
- Protruding front teeth
- Difficulty speaking and doing manual tasks simultaneously



THE PALMAR REFLEX

This reflex is a whole fist grasp in response to an object or finger being placed into the palm of a baby's hand. It's a real crowd pleaser in an infant but not in an older individual.

A child with this reflex at preschool or school may present with poor fine motor skills. No matter how many times you model the correct pencil grip, it will not stick! Handwriting is consequently messy and even the most avid storyteller will struggle to capture their amazing ideas on paper. The mechanics of it all gets in the way.

PALMAR IN A NUTSHELL:

- Poor fine motor skills
- Incorrect pencil grip
- Messy handwriting
- Slumped posture at a desk
- Poor spelling
- Struggle putting ideas into writing



FEAR PARALYSIS REFLEX (FPR)

The Fear Paralysis Reflex develops in utero and should also disappear (integrate) in utero. In this way it is unique from the other primitive reflexes which exist primarily to aid our survival once born. What this means is that no human being should still have an active FPR but more of us now than ever before still do- WHY?

Pregnancy complications, be they of physical, chemical or emotional origin, interrupt the normal process of integration which takes place late in the first trimester.

The Fear Paralysis Reflex is a withdrawal reflex, helping the foetus to retreat from perceived threat, be it a loud noise or contact with the uterine wall. If you still have this reflex, the withdrawal response to stress remains. You are the child clinging with all of your might to mum or dad at a social gathering. You are the adult who removes yourself from the world when things go wrong. You retreat, you shut down and you give the label 'shy' a whole new meaning.

Selective mutism is connected with the Fear Paralysis Reflex, and new research suggests that in some cases, SIDS may be too. Anxiety, depression, and low self esteem are key features of anyone with this reflex, accompanied in some cases by night terrors and sleepwalking.

Sadly for those who are born with the FPR, the body's natural process of reflex integration is stalled. That means those with the Fear Paralysis Reflex will also have many, if not all of the reflexes we have already explored.

FPR IN A NUTSHELL:

- Anxiety
- Low self-esteem
- Depression
- Low tolerance to stress
- Elective mutism
- Extreme shyness
- Overly clingy
- Phobias
- Eating/sleeping disorders
- Shallow breathing
- Dislike of change and surprises
- Obsessive Compulsive Disorder (OCD)
- Physical paralysis under stress (deer in the headlights)
- Low blood pressure
- Motion sickness
- Dislike of going upside-down



PRIMITIVE REFLEX INTEGRATION

Do you see what I mean now? Primitive reflexes really are the foundation for EVERYTHING. The exciting thing about primitive reflex integration however, is that it's never too late to facilitate the process. If a baby did not naturally integrate their reflexes in the first year of life, we are able to replicate these core movements, giving the brain and body a second chance to connect and integrate.

The ideal of course is to assist reflex integration in the first twelve months of life. Here are some ideas to support this evolution:

- Where possible, allow the natural process of birth to evolve without intervention
- Provide babies with an abundance of tummy time in babyhood. The golden rule is little amounts often.
- Reduce our use of baby equipment
- Allow babies to sit themselves when they are ready, in place of propping to sit from a young age
- Provide freedom and encouragement for babies and toddlers to move
- Allow babies to crawl for as long as they need to. They will walk in their own time, when they are ready to do so. 'Walking' a baby, supporting at the hands, is unnecessarily rushing children to the next stage of development, one that they are not yet ready for.

For children who need a little developmental nudge, there are two programs that I recommend for intervention:

1. Rhythmic Movement Training (RMT):

This is an individual movement modality, consisting of passive and active floor based movements. A Rhythmic Movement Consultant supports the family in implementing these with a daily home program.

RMT can be used with babies through to adults.

Visit www.RhythmicMovement.org

2. Move to Learn:

Move to Learn is a classroom based movement program which offers primitive reflex integration to all children, facilitated by the educator. It repeats the movement milestones of a baby, one at a time. Move to Learn is a low cost and easy solution for helping the most amount of children-at child care, preschool or school. However, it can also be used by families at home where cost or location restricts access to one-on-one work with a therapist.

Visit www.MoveToLearn.com.au

ABOUT CLARE

My journey began as an Early Childhood Educator, teaching preschool and junior primary students. I loved my job, however I felt half-baked when it came to working with children who had additional learning or behavioural needs.

I began to study in my spare time and eventually graduated with a Masters Degree in Special Education. I was now fully equipped to work with children who had identified developmental challenges. I still encountered students however, who didn't tick the boxes for a diagnosis but were struggling in certain aspects of life, in the classroom and beyond.



The light bulbs started to go off after I became a Mum, thanks to my part time job teaching at Gymparoo. It was here that I finally heard about the primitive reflexes and knew that it had been the missing piece of the puzzle.

I started to read and study to deepen my knowledge of primitive reflex integration. Along the way I learned some hard truths, that my children and I also had retained reflexes. While confronting at the time, this has given me the best training ground to establish what works and what doesn't.

Through my business, Thriving Children, I help little ones to reach their full potential. I do so by supporting individual families on their journey of reflex integration and also by training educators in the connection between movement and learning.

FROM HERE...

- Please get in touch with any burning questions
- Find out more about my services and events
- Become part of the Thrive Facebook community

And one last thing... remember, it's never too late to create positive change!