

How Retained Primitive Reflexes Impact Child Development?

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Newborn babies are born with numerous primitive reflexes or involuntary movement patterns that happen in response to certain stimuli. These primitive reflexes (from the primitive parts of the brain) increase the odds of survival after birth and are helpful in early development, laying a foundation for higher-level learning.

As the brain matures, these primitive reflexes (https://www.physio-pedia.com/Primitive_Reflexes) should disappear. When a reflex integrates, it enables new, more mature movement patterns to develop, supporting your child's growth and development.

But...that doesn't always happen. Some children retain their primitive reflexes. And that can lead to childhood difficulties.

How do retained primitive reflexes affect child development?

Retained primitive reflexes (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5778413/#>) may affect



Exploring the spectrum of movement disorders (<https://neurofitbraincentre.com.au/the-spectrum-of-movement-disorders/>)

Movement disorders are a group of nervous system disorders that affect your movement. Depending on the particular disorder in question, you may experience an increase or decrease in movement, which you may (or may not) be able to control.

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Understanding colour and light therapy (<https://neurofitbraincentre.com.au/colour-and-light-therapy/>)

your child's:

- *Motor skills* – retaining the symmetrical tonic neck reflex may cause poor posture and poor hand-eye coordination, leading to clumsiness or difficulties with running, swimming, cycling, throwing and catching
- *Sensory processing skills* – retaining these reflexes can decrease the brain's ability and efficiency in processing sensory information:
 - Asymmetrical tonic neck reflex (ATNR)
 - Symmetrical tonic neck reflex (STNR)
 - Tonic labyrinthine reflex (TLR)
 - Plantar reflex
 - Palmar reflex
 - Rooting reflex
 - Spinal Galant reflex.

Retained reflexes may contribute to:

- *Learning difficulties* – retaining the asymmetric tonal neck reflex may cause difficulties with eye-tracking, distinguishing right and left, reading and telling the time
- *Psychomotor difficulties* – reflex retention may contribute to behaviour difficulties.

In real life, you might see a child who avoids ball games because he struggles to catch or kick. He sits on the sidelines, watching his friends play. He's not usually invited to join in...

Or you might see a child who works hard – so hard – at her schoolwork. She tries and tries, but somehow, it doesn't seem to come together. It's so hard to focus on the letters and exhausting. Her marks are poor, her self-esteem is plummeting, and she's beginning to feel like the effort isn't worth it.

Retained primitive reflexes and ADHD

Several studies have shown that children with ADHD (<https://neurofitbraincentre.com.au/people-we-support/adhd-treatment-for-kids-and-adults/>) are more likely to have retained primitive reflexes.

Four reflexes (<https://www.additudemag.com/retained-primitive-reflexes-and-adhd-symptoms-treatment/#:~:text=A%20child%20who%20retains%20the,seen%20in%20children%20with%20ADHD.&text=The%20other%20reflex%20closely%20lin>) have gained particular attention for their role in ADHD, namely:

- Moro reflex (startle reflex) – retaining this may make a child hypersensitive to outside stimulation, causing them to seem fidgety or restless.
- Spinal Galant reflex (believed to encourage progress towards crawling) – retention may lead to bedwetting, difficulty concentrating, short-term memory issues, or fidgeting.
- Asymmetric and symmetric tonic neck reflexes (<https://www.frontiersin.org/articles/10.3389/fpsy.2023.1175974/full#:~:text=ATNR%20and%20STNR%20in%20the,the%20ADHD%20symptoms'>) – retention may lead to conduct problems, anxieties, impulsivity-hyperactivity and learning problems.

How Neurofit Brain Centre can help

At Neurofit, we believe that brain activity makes an active difference. The brain can adapt in response to different stimuli, which may enable the integration of retained primitive reflexes (<https://neurofitbraincentre.com.au/people-we-support/primitive-reflexes-integration-for-kids-adults/>).

The Neurofit program (<https://neurofitbraincentre.com.au/our-services/>) includes a range of therapies designed to stimulate the brain to encourage the development of new neural connections. You can book an assessment (<https://neurofitbraincentre.com.au/contact-us/>) here.

Disclaimer

All information is general and is not intended to be a substitute for professional medical advice. Neurofit Brain Centre can consult with you to confirm if a particular treatment approach is right for you.

Colour adds beauty to life, which is why you pay close attention to it when August 8, 2024

Dementia and Parkinson's disease treatment using light therapy and brain stimulation
(<https://neurofitbraincentre.com.au/dementia-and-parkinsons-disease-treatment-using-light-therapy-and-brain-stimulation/>)

Discover the benefits of brain therapy for Parkinson's and dementia patients. Improve memory, cognition, visuospatial attention, and motor control.

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Understanding the startle reflex: When does it fade away?
(<https://neurofitbraincentre.com.au/understanding-the-startle-reflex-when-does-it-fade-away/>)

Have you yawned, blinked, coughed or sneezed today? Those are examples of involuntary movements –

August 1, 2024

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Neuroplasticity in focus:
Recognising signs of brain
imbalance in children
(<https://neurofitbraincentre.com.au/in-focus-recognising-signs-of-brain-imbalance-in-children/>)

Your baby is born with billions of neurons (brain cells), but they're not really connected

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Opening hours

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