

RETAINED REFLEXES

Primitive reflexes play a crucial role in survival and early development. We are all born with primitive reflexes and they should, ideally, naturally integrate – sometimes, they don't which can potentially cause problems for children in many areas.

00:00 / 01:01



THE FOUNDATION OF DEVELOPMENT

Retained primitive reflexes, which typically integrate and disappear by 12 months of age, or sometimes by two to three years, play a crucial role in a child's development. Their integration allows for more sophisticated movement patterns and higher-level learning. For example, an infant must develop head and neck control before sitting upright independently. Failure to integrate these reflexes can hinder development and the acquisition of advanced skills.

Retained primitive reflexes, those persisting beyond the expected integration period, can impede development in various areas. Since many reflexes are interconnected, the retention of one often indicates the presence of others.

A 2016 study found that retained reflexes could disrupt natural development, leading to difficulties in

social, educational, and psychomotor domains.

Activities typically associated with childhood, such as playing with peers, running and jumping, learning to read and write, and performing self-care tasks, can be adversely affected by these retained reflexes.

CAUSES OF RETAINED REFLEXES

Although research into the exact causes of retained primitive reflexes is limited, several potential factors have been identified:

- Trauma during pregnancy
- Trauma during or after birth
- Exposure to toxins, drugs, or tobacco in utero
- Stroke in utero
- Caesarean section delivery
- Premature birth

- Prolonged jaundice
- Feeding problems in the first 6 months of life
- Developmental motor delays
- Limited floor time during infancy

This list is not exhaustive, but it highlights some factors that have been associated with retained primitive reflexes. It is important to recognise that the presence of these factors does not guarantee the retention of primitive reflexes in a child.

PREVALENCE OF RETAINED REFLEXES

While there are no extensive studies on retained primitive reflexes comparable to those for Autism or ADHD, several smaller studies provide insight into their prevalence. Clinical experience suggests that retained primitive reflexes are more common than often assumed.

These reflexes exist on a spectrum, with partial integration possible.

Testing typically uses a scale from 0 (fully integrated) to 4 (highly retained).

One study examining 21 preschool children found only one child without retained reflexes. About 29% scored a 1 or 2, while 50% scored a 3 or 4.

The most common retained reflexes were:

- TLR: 95%
- ATNR: 86%
- Left ATNR: 81%
- STNR: 67%

Another study of 35 healthy children aged 4 to 6 showed that 89% had at least one retained reflex. A larger study with 53 children aged 5 to 7 found that all participants had at least one active reflex, with the most common being STNR, ATNR R, and ATNR L.

COMMON RETAINED

REFLEXES EXPLAINED

With children, Occupational Therapy often focuses on self-care tasks, social skills, motor development, and sensory integration, all of which can be influenced by retained primitive reflexes.

The six primitive reflexes most commonly addressed in Occupational Therapy are:

MORO REFLEX

TONIC LABYRINTHINE
REFLEX (TLR)

PALMAR GRASP REFLEX

ASYMMETRICAL TONIC
NECK REFLEX (ATNR)

SYMMETRICAL TONIC
NECK REFLEX (STNR)

IMPACT OF RETAINED REFLEXES IN CHILDREN

Retained reflexes
can significantly
impact a child's
development,

affecting motor skills, coordination, and learning abilities.

Understanding these impacts is crucial for identifying developmental delays and implementing interventions.

DEVELOPMENTAL ISSUES

Retained primitive reflexes can lead to various developmental issues in children. Typically integrated into mature movements as a child grows, these automatic reflexes can interfere with developing proper motor control and coordination if they persist beyond the expected age.

Some potential issues include:

1. **Poor Motor Coordination:** Difficulty with activities that require fine and gross

SCHOOL READINESS

Children's motor development, reliant on skeletal and neuro-muscular growth along with environmental interaction, is vital for school readiness.

Infants' rhythmic activities, such as kicking and twisting, help transition uncoordinated movements into coordinated motor skills with sufficient practice and exercise. These skills encompass gross motor activities like running and jumping and fine motor tasks such as feeding and writing. A growing number of children enter formal

motor skills, such as writing, cutting with scissors, or participating in sports.

2. **Balance and Posture**

Problems: Challenges in maintaining balance and proper posture, leading to clumsiness and frequent falls.

3. **Learning Difficulties:**

Struggles with reading, writing, and other academic skills due to the impact on visual tracking, eye-hand coordination, and concentration.

4. **Behavioral Issues:**

Increased frustration, anxiety, and behavioral problems as a result of the difficulties in performing tasks that are easy for their peers.

5. **Sensory Processing**

Disorders: Over-sensitivity or under-sensitivity to sensory stimuli, which can affect a child's ability to process and respond appropriately to sensory information.

6. **Delayed Developmental**

education without these crucial physical abilities, risking academic underachievement and behavioral problems.

School readiness extends beyond age – requiring physical abilities like sitting still, paying attention, and controlling eye movements for reading, all linked to neuro-motor maturity.

Early intervention for retained reflexes is crucial for children's development and school readiness.

Occupational Therapy plays a key role in addressing these issues by integrating reflexes and supporting neuro-motor development. Through targeted interventions, an Occupational Therapist can help mitigate the negative impacts of retained reflexes, promoting better physical and cognitive functioning. This early support enhances children's readiness for school and overall educational success, ensuring they are well-equipped to thrive in an academic environment.

Milestones: Slower achievement of milestones such as crawling, walking, and talking, which can impact overall development.

**DOES
MY
CHILD
HAVE
RETAINED
ED
REFLEX**



Determining if your child has retained reflexes is crucial for understanding potential developmental delays that can affect their school readiness and overall well-being.

Retained reflexes, which are primitive reflexes that should have been naturally integrated as a child grows, can interfere with motor skills, coordination, and cognitive functions. Identifying these reflexes can help parents and caregivers recognize signs that might indicate the need for intervention.

RETAINED REFLEXES CHECKLIST

Use the following checklist to identify if your child may exhibit symptoms of

retained primitive reflexes.

Please note that this checklist is not meant for diagnostic purposes but serves as an assessment tool for potential retained primitive reflexes.

If you have checked off half or more of the symptoms mentioned, your child may have one or more retained primitive reflexes.

Consulting with an Occupational Therapist (OT) can be an important next step. Occupational Therapists (and paediatric chiropractors), are experts in identifying and integrating these reflexes, which can impact a wide range of developmental areas.

RETAIN

ED REFLEX ES ASSESS MENT

Our Occupational
Therapists are trained to
assess and integrate
retained primitive reflexes
in our clients. If you think
your child may have
retained reflexes, get in
touch to arrange an
assessment.

Call or text us on 0466 074
208

**BOOK AN
ASSESSMENT**

GET IN TOUCH

BOOK ONLINE SERVICES
CONTACT VIDEOS

PRIVACY AND
CANCELATION POLICY