

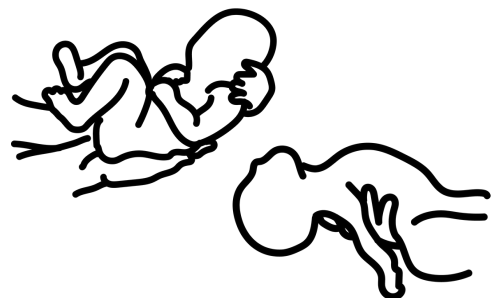


YOUTUBE FREEBIE

The Tonic Labyrinthine Reflex (TLR)

What is the TLR?

- The Tonic Labyrinthine Reflex (TLR) has two movement patterns - forwards and backward.
- This reflex is activated with neck flexion (forward) or extension (backward) - movement of the head up or down.
 - When an infant looks down (neck flexion), this causes the arms and legs to flex or curl into the body.
 - When an infant looks up (neck extension), this causes the arms and legs to extend.
- The TLR splits the body into front and back planes, where as other reflexes split the body into top and bottom (STNR) and left and right (ATNR).
- The TLR is thought to help the infant with the newfound challenge of gravity. It also directly affects muscle tone due to the movement of the arms, legs, neck, and trunk and it's connection to the vestibular system.
- The TLR helps to differentiate and coordinate the front and back of the body. Flexion and extension of the muscles as a result of head positions changes. You can begin to understand the direct connection to the vestibular system.
- This reflex is responsible for muscle tone, posture, head-righting, vestibular and proprioceptive skills, as well as body awareness.
- Additionally, because head movements activate the TLR, this reflex is also directly related to the Moro Reflex. As the infant begins to gain head control, the TLR and Moro will begin to integrate, and the response in the arms and legs will begin to change - more control of the arms and legs will begin to develop.



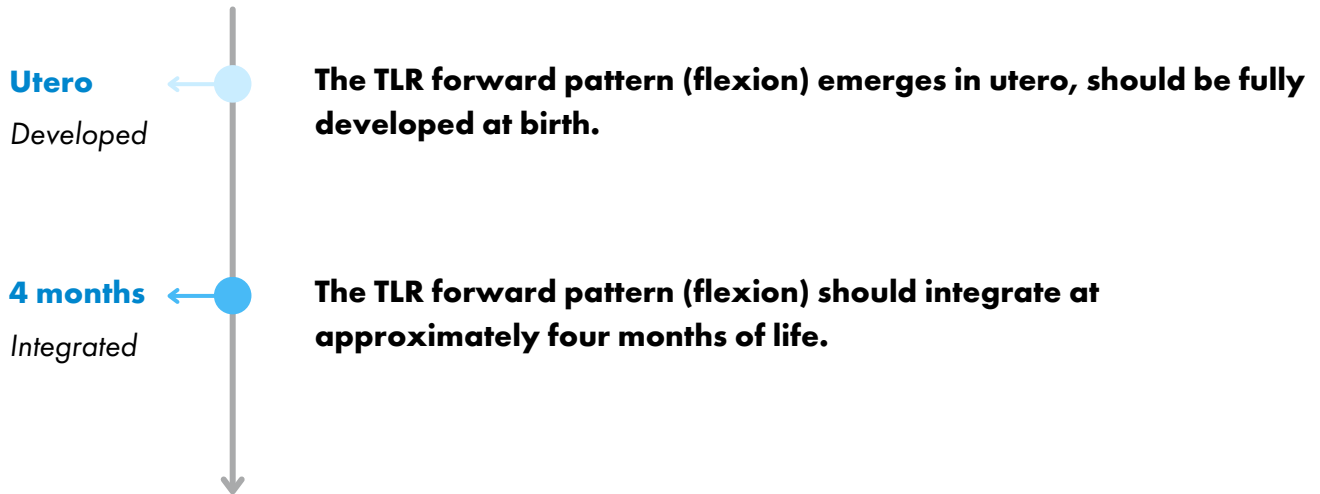
Source:

Integrating Primitive Reflexes through Play and Exercise

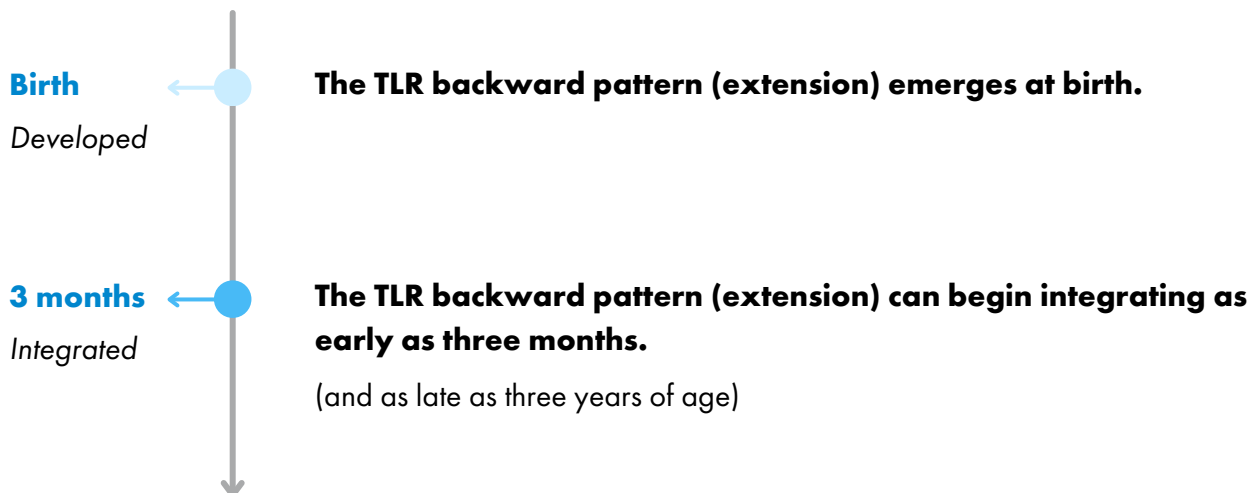
TLR Integration:



The TLR Forward Pattern (Flexion)



The TLR Backward Pattern (Extension)



Special Notes on Integration:

Special Note #1

If a child has successfully integrated their primitive reflexes, a sudden or chronic bout of trauma, stress or injury can re-activate these reflexes.

Special Note #2

While there is no guarantee for reflex integration, there are contributing factors to consider if the child has an unintegrated TLR.

Special Note #3

Because of the connection between the Moro and the TLR, if the Moro is retained, it's likely that the TLR will also be retained.

What an unintegrated TLR looks like:

Emotional and educational challenges, confusion and 'overload,' ADHD-type behavior such as disorganization and forgetfulness.

Difficulty blocking out irrelevant stimuli or easily stressed under pressure.

Language challenges, such as speech disorders, sequencing difficulties that make spelling and composition harder.

Behavioral issues that make learning from mistakes and understanding cause and effect difficult.

Additional symptoms of a potentially retained TLR:

- Challenges with creeping and crawling as an infant
- Poor posture
- Weak muscles / low muscle tone
- Decreased balance
- Poor ocular motor skills
- Visual-perceptual challenges
- Auditory processing difficulties
- Decreased organization skills
- Challenges with multi-sensory processing
- Spatial awareness difficulties
- Dislike of sports
- Dyslexia, Dyscalculia and/or Dysgraphia

Source:

journals.plos.org/plosone/article?id=10.1371/journal.pone.0214548



The Landau Reflex

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What is the Landau Reflex?

- The Landau Reflex is considered a secondary reflex due to the fact that it appears after birth.
- In fact, it should appear AFTER the TLR has integrated - around 4 months of age.
- When the baby is laying prone (on stomach), instead of letting himself fall by gravity, the baby tenses, stretching the trunk and legs and raising the head to see ahead and look for a visual reference.
- This reflex is often noted as the 'swimming' reflex, as the baby often has all 4 extremities off the floor, held against gravity.
- The TLR and the Landau Reflex assist the infant in developing muscle tone throughout the neck, back, and core.
- The Landau Reflex contributes to vestibular processing, ocular motor skills, and postural control.
- When the Landau Reflex has not appeared by 6 months, it could indicate presence of neurological damage.

Dr. Thomas Hanna...

...has referred to the Landau Reflex as the 'Joy Reflex,' as it relates to an infant's joyful exploration of the world with expanding movement.

"Joy is what happens to us when we are able to realize how wonderful life is once the Landau Reflex is integrated."

In the business world, 80% of people over the age of 40 have spinal pain, which is likely a result of a chronically contracted spine, caused by an unintegrated Landau Reflex.

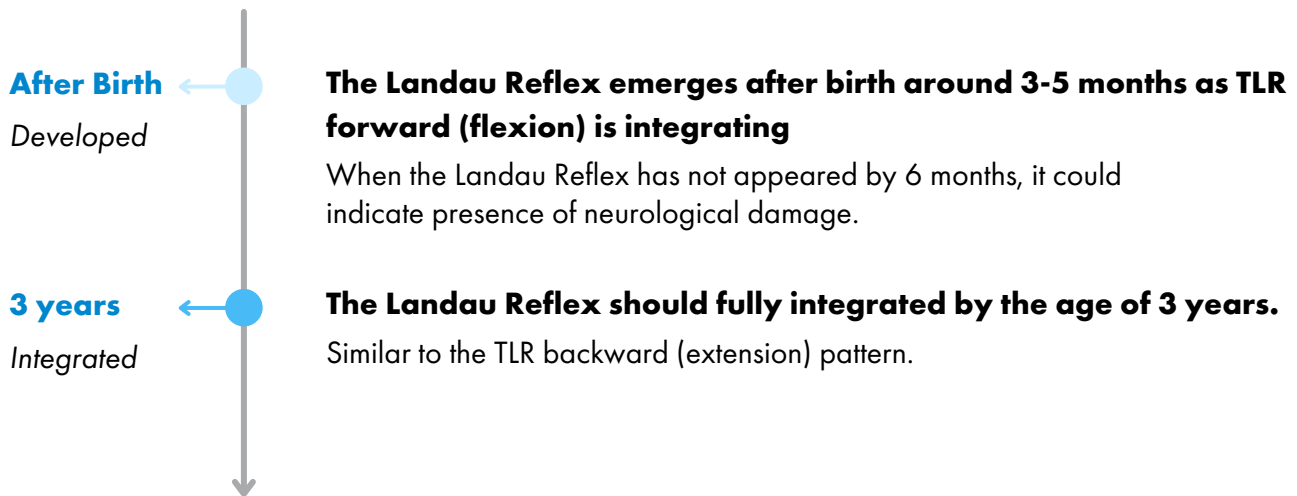
A person who is depressed may not be able to put their body into the Landau position.

Source:

The Symphony of Reflexes



Landau Reflex Integration:



Special Notes on Integration:

Special Note #1

If a child has successfully integrated their primitive reflexes, a sudden or chronic bout of trauma, stress or injury can re-activate these reflexes.

Special Note #2

While there is no guarantee for reflex integration, there are contributing factors to consider if the child has an unintegrated TLR or unintegrated Landau Reflex.

Special Note #3

The Landau is directly connected to the TLR. Therefore if the TLR is retained, it's likely the Landau is also retained.

Source:

journals.plos.org/plosone/article?id=10.1371/journal.pone.0214548

What an unintegrated Landau Reflex looks like:

Low muscle tone, poor ocular and vestibular skills.

Behavioral challenges such as self-denial, lack of assertiveness, or breaking commitments.

Education and emotional difficulties such as challenges with concentration or poor organizational skills.

Additional symptoms of a potentially retained Landau Reflex:

- Poor posture and muscle tone
- Delayed motor development
- Rotated pelvis
- Often skips crawling in infancy
- Poor coordination for activities that require upper and lower body coordinated movements, such as somersaults
- Vision, attention and concentration challenges
- Difficulty being assertive, responding to danger, or transitioning between activities
- Poor emotional skills
- Challenges with concentration in school
- Decreased organizational skills

Conditions associated with a retained Landau Reflex:

- ADHD
- Autism
- Cerebral Palsy
- Depression
- Down's Syndrome

Source:

The Symphony of Reflexes