Crossing the Midline Workshop

Crossing the Midline refers to the ability to reach across the middle of the body with the arms and legs crossing over to the opposite side. The left side of your brain controls the right side of your body, and the right side of your brain controls the left side of your body. When your right arm or leg crosses over to the left side of the body or vice versa, it forces the left and right side of your brain to work together.

Why is crossing the midline important?

Crossing the midline of your body helps build pathways in the brain and is an important prerequisite skill required for the appropriate development of various motor and cognitive skills. When your child spontaneously crosses the midline with the dominant hand, then the dominant hand is going to get the practice that it needs to develop good fine motor skills. E.g. learning to write, there has to be a dominant, strong hand that becomes specialised at doing the job of controlling the pencil.

Reading, writing, and many self-care and daily living skills require crossing the midline e.g. reaching toward your foot to put on a shoe and sock with both hands. Participating in many sports and many other day to day activities also require this.

The right and left side of your brain are responsible not only for controlling the left and right parts of your body, but specialize in processing different types of information. The left side uses logic, facts and rules. It governs language and words, math and science, pattern and order. The right side uses feeling, it sees the big picture, it recognizes symbols and images. The right side processes spatial perception, and object function. The right side allows us to imagine possibilities

How does it develop?

It begins by age of 6 months e.g. when they reach across their highchair for a Cheerio, or when they follow you with their eyes as you walk across the room. Crawling is an important developmental stage for brain development and therefore crossing the midline. When an infant crawls, he uses his left knee together with his right hand to propel himself forward. Crossing the midline should be developed by the age of 3 or 4 years old.

As your child learns to coordinate a strong hand which is doing something skilled (e.g. cutting) and an assistant hand which is helping (e.g. holding the paper), the ability to spontaneously cross the midline develops.

However, there is another vital factor in crossing the midline, and that is trunk rotation. If your child tends to have poor core stability, or holds him or herself “stiffly”, moving the body as a unit, then this may affect crossing the midline.

What happens if they don’t develop this skill?

If your child avoids crossing the midline, then both hands will tend to get equal practice at developing skills, and your child’s true handedness may be apparently delayed. If both hands are being used, then your child may well end up with 2 mediocre hands rather than one strong, specialised hand. And mediocre hands do not produce great handwriting!

Children who have difficulty crossing midline may appear ambidextrous because they are often observed using both hands, but they actually have a hidden neuroprocessing issue. Both sides of their brains are not communicating, resulting in decreased coordination, decreased motor control of movements and difficulties achieving higher level skills. Often, these children end up with two unskilled hands.

It can affect his/her ability to read. While the child is moving his/her eyes from left to right across the page, the eyes will stop at midline to blink and refocus; however, when this happens, the child will very frequently lose his/her place on the line and become confused as to where they left off.

It can also affect handwriting, as diagonal lines cross the midline, and the child may need to stop in the middle of the page to switch hands when writing from left to right.