

**WHAT IS NeuroDevelopmental Movement?**

NeuroDevelopmental Movement (NDM) is an approach to behavioral, academic, psychological, social, and physical

challenges of both children and adults with any form or degree of injury or delay in the central nervous

system. NDM is fully informed by, and takes all of its powerful tools for change from, the model for natural growth

called the Developmental Sequence.

It is critical to recognize the source of our information, the Developmental Sequence before going on to define the

practice based on that model. The Developmental Sequence is the hierarchy of physical activities through which

every human being moves. From pre-natal activities up through cross pattern walking, all humans are genetically

programmed to move through an ascending hierarchy of functional movements, each of which stimulates the next

phase of growth. Each layer of development is built on the layer of growth that occurred prior, so it is critical that

each stage is fulfilled in a timely manner. This hierarchy of movements is responsible for our anatomical and

neurological health.

We can support the unfolding of the Developmental Sequence in neonates, infants, and children by providing

appropriate environments that allow and support them in a full range of motor activities and sensory experiences in

the context of appropriate parenting.

However, that ideal environment for the infant and young child is not always a reality, so in many cases, stages of

development may be missed. In addition, children who are born with neurodevelopmental challenges, for example,

brain injuries resulting in the diagnosis of Cerebral Palsy, strokes, or toxic exposures in utero, may need to work

longer and harder to build stability at various stages of the Developmental Sequence. By replicating the

Developmental Sequence through a program of NeuroDevelopmental Movement, we are able to create a healthy

physical body and nervous system.

NeuroDevelopmental Movement is the specific approach that meets the needs of this child or adult in the most

comprehensive way available because it follows the Developmental Sequence. Through its neuro-motor and

sensory programs, NDM completes and fills in gaps in development, allowing the client to move forward in their

anatomical and neurological growth.

NeuroDevelopmental Movement is a movement and sensory-based, drug-free approach to addressing the challenges

of a disorganized or injured brain. Brains can become dysfunctional with a patchy or spotty distribution of

challenges that often stand out against a pattern of largely normal neuro-developmental skills. They may present

themselves against a background of good intelligence, while behavior can be extreme and unmanageable. Some

children have pervasive neurodevelopmental challenges that impact all areas of their functioning, and in more

extreme cases, children are globally delayed, or brain injured.

More commonly, however, children can have a wide range of less extreme, but still highly challenging diagnoses,

including most of the “alphabet” diagnoses: RAD, ODD, OCD, ADD, ADHD, FASD, CP, Tourette’s, Autism

Spectrum, etc. All of these diagnoses are on a continuum of a damaged or under-developed brain.

The Central Problem lies in the brain itself, rather than in any number of other factors that have been considered in

the child’s experience. The brain itself is the central problem, and when you have a central problem, you can

logically posit a central solution. Thus, when you treat the central organism, the brain itself, you can go a long way

toward recovery.

**HOW DOES NEURODEVELOPMENTAL MOVEMENT WORK?**

NeuroDevelopmental Movement addresses these issues by evaluating skills at seven developmental levels, and

considers reflexes, movement, and sensory development. If there are gaps at any level, work is begun at the lowest

level to enhance functionality and complete the required developmental task, by replicating the activities that a

neurologically typical child instinctively utilizes to integrate the brain. There is some variation on this if the child

has been traumatized in utero.

The tools that are naturally provided to integrate the infant brain are the most effective way to integrate a brain that

is missing some of those functions that lead to the above diagnoses.

A typical infant goes through a series of reflexes or whole-body patterns of movement that lead to mobility and

expand their sensory world. The more they move through the activities that comprise the Developmental Sequence,

the greater the interaction with parents and the sensory world around them, the more they will be neurologically,

emotionally, physically, academically, and socially whole.

Some children who were neurologically compromised at birth need more of these activities than is seen in typical

development. By going back to replicate the Developmental Sequence, in these children, the brain is prompted to

integrate the functions that, if left un-integrated, become rages, dyslexia, repetitive behaviors, bed-wetting, poor

coordination, dyslexia, ADD . . . the list goes on.

**HOW DOES A BRAIN BECOME DISORGANIZED OR INJURED?**

How do those gaps in functioning occur? Specific brain damage can mean, for example, that the baby was dropped

on its head; they may have had a stroke in utero; in some children we see exposure to alcohol or drugs during

pregnancy—all of these are obvious. Less obvious are toxins in our environment, such as mercury, arsenic, lead,

etc., that are in the chemicals we use every day. A highly stressed mother’s biochemistry will also flood the fetal

brain with cortisol, which damages brain tissue. Other circumstances that can compromise the brain

include: premature separation of the placenta, a difficult birth in which the baby’s head gets stuck against the

mother’s pelvic bones, with pressure on the skull and brain, the umbilical cord wrapped around the neck with

unrelieved pressure, jaundice—all of these can cause compromises in the brain.

Separation from the biological mother, through adoption or merely a mother going right back to work, can

traumatize the neonate. High fevers and medications can damage the brain. Anesthetics are culprits, and recent

research has shown that babies who are administered anesthetics prior to two years old are more likely to have

learning disabilities.

In addition, when children’s natural motor activity is interrupted, they may skip critical parts of their developmental

process. Children who do not have adequate opportunity to crawl or creep due to constant holding, growing up in a

car seat or variations of a “walker”, children who are sometimes referred to as ‘bucket babies’, can have specific

impairments that lead to learning and behavior challenges.

**WHERE TO BEGIN?**

A NeuroDevelopmental Specialist will assess a child with all of this in mind and provide a program of activities that

should take about an hour a day. These activities will replicate any missing stages and will include reflex, motor,

and sensory activities. NeuroDevelopmental Movement provides the client with one of the most comprehensive,

effective, and natural approaches to these challenging issues.

Traditionally, the prevailing approaches in our culture respond to challenging children with one or both of two

solutions, either: 1) Change or modify the behavior directly through behavioral programs or coaching—including

social behavior, academic behavior, and physical behavior; or, 2) Medicate.

We are given primarily these modalities, but with the ever-increasing level of dysfunction in our children, we must

look beyond the two approaches that have been tried for an extended period of time with no resolution of the bigger

trends in the culture. We challenge all of our clients to look beyond interventions that have failed to heal the current

problems in childhood mental and physical health, and look to the central solution which, on examination, is the

most logical and effective approach. Treat the brain itself with what the brain naturally needs.

NeuroDevelopmental Movement discards the behavior and/or medication model and focuses on the problems

underlying the neurological dysfunction. The central problem is met with a central solution.

If medication would consistently work without side effects, parents might consider the effort put into the process as

“too much”. Completing an NDM program takes approximately two years for many children, and for those children

with considerable trauma, it can take up to three years in the resolution process.

This is daily work, yet we have known families who have worked for two years simply adjusting medications with

no improvement, and sometimes some huge regressions in behaviors. So, as difficult as it may be to take an alternate

route, five years from now those who have worked to resolve the source of the problem will be getting on with their

lives, whereas those who have only addressed the symptoms through the behavior/medication model, will be dealing

with, perhaps, teenagers whose behaviors have escalated.

NeuroDevelopmental Movement, properly done, can lead to tremendous healing in the vast majority of

children. Adults who have suffered these same insults to the central nervous system can do as well as children. In

addition, adults who have had central nervous system insults, such as a traumatic brain injury or stroke, can find a

great deal of resolution of their issues through this process. All NeuroDevelopmental Movement Consultants work

with adults, as well as children, and we welcome their unique insights. We celebrate their full resolution of

symptoms as much as we do in our children.

**SERVICES**

* Free 20-min phone consultation
* 3-4 Hour Full Neurodevelopmental Assessment (divided into 2 appointments), complete with a comprehensive look at findings and a NeuroDevelopmental program personalized to the client’s needs. The program will be created at the initial appointment and all participants will be trained in its execution.
* Free Follow-up Support by phone, email and/or zoom.
* 2-hour Re-Assessments, completed every 2-3 months until the client graduates from the program.
* Live presentations available for schools, preschools, daycares, parenting groups, community groups.

**NEXT STEPS**

* Book a free phone consultation with Sandy Smith by emailing [Sandy@cbfclinic.com](mailto:Sandy@cbfclinic.com) or by calling 888-317-5605.
* Book an NDM Initial Assessment appointment by emailing [Sandy@cbfclinic.com](mailto:Sandy@cbfclinic.com). NDM Appointments are held at our Brain Studio location at 7400 Carmel Executive Park, Suite 130 in Charlotte.