

MNRI® Reflex Integration and Dyslexia



Dates: June 18-20, 2021

2.4 CEUs / 24 Contact Hours

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The Masgutova Method® is a set of programs focused on the restoration and maturation of primary movements, reflexes, coordination systems, and skills for optimal performance of natural mechanisms, developmental processes, brain functioning, and sensory-motor integration. The Masgutova Method® is oriented on the stimulation of reflex patterns in order to awaken natural, genetic motor resources, self-regenerating programs, strengthen motor memory and sensory-motor coherence. This achievement innately carries the implication of the fulfillment of all potentials within movement abilities and learning skills.

The Goal of this MNRI® Program is to provide children and adults reliable knowledge and safe tools for the use of natural, genetic sensory-motor resources to facilitate neurosensorimotor development, processing, stress-management and successful learning.

Introduction

The most basic definition for 'Dyslexia is *"a variable often considered a familial learning disability involving difficulties in acquiring phonological and language processing that is typically manifested by a lack of proficiency in reading, spelling, and writing, and sometimes in arithmetic"* shows that this disorder can be considered an educational and neurophysiological issue (National Institute of Child Health and Human Development - NICHD, <http://eida.org/definition-of-dyslexia/>). This disorder does not mean an abnormality of intelligence; with the individual often demonstrating a unique set of talents and creativity. Dyslexia is caused by a certain atypical set of neurological characteristics and a lack of coordination between systems as hand-eye, ocular-vestibular and etc.

The MNRI® programs explain that the difficulties of dyslexia are involuntary and their cause is explained as the effect of developmental delays and lack of maturation of primary reflex and sensorimotor patterns. These difficulties can cause light, moderate or severe challenges in people with this disorder although their intelligence falls in the normal range (National Institutes of Health, 2015), with their motivation for learning high.

Problems at school, chronically delayed learning, grades below average, difficulties with internalizing studied curriculum are some of the effects of a learning disorder called dyslexia. Dyslexia may be considered as an educational determination of a Specific Learning Disability. Diagnostic procedures for every type of specific learning disorder uses standardized tests for evaluation of corresponding academic competencies, like for reading: (if overall reading skills, accuracy and comprehension correspond to a person's chronological age, measured intelligence, and age-related education (school skills). In case of the presence of a sensory deficit in their disorder, difficulties in reading are considered as specific sensory deficit (

<http://ldhope.com/resources/dyslexia/dyslexia-diagnostic-criteria/>).

The common symptoms of Dyslexia recognized by the International Dyslexia Association (2014) include:

- Problems sounding out words
- Difficulty recognizing known words
- Poor spelling
- Slow reading
- Problems reading out loud with correct expression
- Problems understanding what was just read

Other markers of dyslexia, include: attention and hyperactive disorders (ADHD, ADD), and difficulties with perception and memorization of numbers. Some other obvious reasons for dyslexia include: the results of a traumatic brain and physical injury, stroke, poor brain myelination, or dementia. The early education challenges of language processing, difficulty memorizing, spelling, poor visual and reading skills are also indicators for possible dyslexia. Still, dyslexia must not be equalized to these symptoms and must not be mixed with challenges in reading because of insufficient teaching methods or hearing and vision impairments (National Institutes of Health, 2015).

The above list of reasons and symptoms studied by scientists still does not cover some important 'markers'/signs of the disorder. One of those, considered throughout long-term MNRI® work with individuals with dyslexia include neuro-sensory-motor (or neurosensorimotor) reflex integration as a neurodevelopmental mechanism and phenomenon, and is considered the domain of brain subcortical structures and the extrapyramidal nerve system which determines the early developmental milestones. The immaturity and dysfunctions in development of reflexes leads to dyslexia, – with first sensory-motor patterns causing challenges in neurological organization which then leads to limitations for executive functions of the brain cortex responsible for the auditory-language decoding and processing system.

This MNRI® Program proposes analysis of the reasons for dyslexia on a deeper level of explanation based on the neurophysiological aspects of the maturation of reflex circuits.

The MNRI® system refers to this disorder as to a challenge as far as it that is treatable, with the quality of learning of a person diagnosed as dyslexia significantly improved or completely solved.

What are the reasons for different challenges in learning? Specifics in the functions of the nervous system and sensory-motor system leads to a seemingly "rigidity" of intellectual and cognitive processes. This rigidity includes "lower individual capacities of internalizing of the information", dominance of processing information through image rather than through use of logical and verbal skills; and, other undeveloped learning skills. Other reasons may include: poor standard of teaching methods, lack of a strong will and motivation on the side of the students, a lack of zeal and diligence. This list also must include the fact, that individuals with diagnosed dyslexia are characterized by a developmental delay of neurosensorimotor reflex maturation. This is the missing piece in research and explanation of dyslexia. Understanding their 'disorder' in terms of neurosensorimotor reflex delays (f.ex.: Babkin, ATNR, Balancing) and dyscoordination of early sensory-motor

patterns (f.ex.: 'hand-eye', 'vision-listening to', palm-mouth-speech') open new perspectives and strategies for solution of this old problem – dyslexia. The MNRI® research of individuals with diagnosed dyslexia shows lower level of maturity of a range of their reflex patterns (S. Masgutova, 2015). Our clinical observations show that delay in development of reflex patterns can be a big reason for limiting the “studying ability/capacity” or “a special sensibility for learning” (term by Z. Kalmijkova, 1986). This program shares the information concerning the problematic areas of the neurosensorimotor reflex development in children and teenagers with dyslexia, and proposes corrective work of their primary coordination systems and repatterning of reflex schemes. Stress of learning and ‘fear of failure’ are typical for individuals with dyslexia. This program aims also to show the links between stress (*HPA-Stress-Axis*) and ‘learning trauma’ resulting in low self-esteem and self-respect, devaluation of own abilities and talents, low achievement motivation and refusals for active participation in learning and life, emotional/mood dysregulation, and the lack of coordination system and reflex patterns maturity (chronological and on level of happened ‘learning trauma’).

This MNRI® Program proposes to shift the focus of researcher and practitioners from strategy of helping the individuals with dyslexia oriented on ‘cortical’ (high brain) learning to the support of resources of the subcortical and extrapyramidal nervous system (basal ganglia – for regulation of excitatory and inhibitory neurotransmitters; hippocampus – for memorizing, limbic brain – for emotional and motivational support, hypothalamus and amygdala – to release the fear of failure and learning stress, and the pituitary gland – for growth factor hormones support and creating the basis for positive emotions and joy). The basis for this approach is that the extrapyramidal nervous and next subcortical brain structures develop during first ten years of a human life and is the basis for language and abstract thinking development. New research shows that historically that school education is oriented at the development of the cortex and uses the teaching methods typical for adult brain functions (classical nervous pathway) which does not correspond to the internal strategy of neurodevelopment of a child (called now “non-classic” pathways). The implementation of this new research must be the focus for new approaches of working with dyslexia individuals and other learning challenges. This new research places importance, on the neurosensorimotor development and on specific changes of the educational systems worldwide.

Participants of this MNRI® course will participate in both the course discussion and hands-on supervised practice. In the course, participants will be introduced to information about neurophysiological aspects of the reflex integration and its benefits for brain functions and control of behavior. The focus of this class is information about functioning of the subcortical and extrapyramidal nervous system (basal ganglia – for regulation of excitatory and inhibitory neurotransmitters; hippocampus – for memorizing, limbic brain - for emotional and motivational support, hypothalamus and amygdala – to release the fear of failure and learning stress, and the pituitary gland – for growth factor hormones support and creating the basis for positive emotions and joy). Region of the brain in individuals with neurodeficits and learning challenges.

The course is based on traditional neurophysiological and recent scientific evidences found in brain research by different authors. This research demonstrates delay or poor development of the subcortical and extrapyramidal nervous system functions in children and adults with neurodeficits such as autism, brain injury and post-traumatic stress disorder affects their everyday functioning and learning.

The course will present procedures and techniques for the work with primary reflex patterns that serve for the establishing the proper physiological circuits, development and maturation of the limbic system and its basal

ganglia, as well as other corresponding centers and links.

This program shares the concepts: by L. Vygotsky (1932/1986) on chronological development of intelligence and consciousness and language, oriented on explanation of delays and immaturity of primary cognitive processes; by A. Luria's concerning the role of brain damage and loss of normal functions of language processing and cognition by patients; also and by Pavlov's concept of activation of three channels of information perception: visual, auditory and kinesthetic-motor. Pavlov Orientation Reflex is discussed as the bases for restoration of the '*studying capacity*' and 'critical thinking' development.

Repatterning techniques and exercises for these reflex patterns are necessary to create a sufficient neurophysiological basis for development of inner control for cognitive skills – focusing, decoding, memorizing and thinking. Development and maturation of the group of reflexes concerned with the work of basal ganglia and limbic system helps the development of the links between motor coordination and inner control for behavior, emotional life and cognition. This course will offer examples of techniques, games, and activities to make the integration sessions using MNRI® exercises interesting and motivating for children and adults. One of most important goals of the course is to develop motivation and social skills through activation of so called mirror neurons responsible for the formation of imitation mechanisms.

The MNRI®: Reflex Integration for Dyslexia Neurosensorimotor Techniques for Individuals with Learning Challenges Program can be used with children and adults considered to be dyslexia with challenging behavior and immature emotional sphere, memory deficits; motor and speech delays; poor social skills and disorientation, problems with decoding, and modeling, "mapping" and imitating problems; and, as a stress/distress release program. Course participants will also learn about primary and natural movements and reflexes, as well as specific exercises to integrate neurodevelopment delays.

Course Objectives

Upon successful completion of the three-day, 24-hour *MNRI® Reflex integration For Dyslexia Neurosensorimotor Techniques for individuals with Learning Challenges* course participants will:

1. Develop knowledge of the Neurosensorimotor Reflex Integration basis for the successful support of individuals with dyslexia found through positive changes in motor, behavioral and emotional responses and cognitive/academic tasks.
2. Explain this new approach of dyslexia support using neurosensorimotor reflex concept.
3. Explain the MNRI® information on rules for creating the links between reflex circuit functions (automaticity level) and skills (consciously programmed, planned and controlled) to base the learning process on natural sensorimotor patterns to make it productive, easier and reliable in stress.
4. Explain the theory of the neurophysiology of a reflex circuit functions and development of its different phases.
5. Explain the theory of the neurophysiology of a reflex circuit functions and links with dyslexia as a limited "studying abilities"
6. Explain the reflex circuit functions and links with different types of dyslexia as a specifics of "the studying abilities" – reading, writing, and math.

7. Demonstrate the repatterning procedures to support the neurosensorimotor reflex maturation.
8. Explain the work with repatterning of reflex schemes referring different aspects/types of dyslexia.
9. Describe the tools and techniques to support the phenomenon of 'the *studying ability/capacity*' for successful learning and externalization of the information and knowledge, also productive self-expression.
10. Investigate the behavioral-cognitive links in individuals with challenges and create the "anchors" based on natural innate mechanisms of neurodevelopment and neuroplasticity for formation of the inner control.
11. Describe the rules and basis for creating these behavioral-cognitive anchors through reflex repatterning.
12. Explain the following reflexes and their specific involvement in development of imitation, inner control mechanisms and cognitive skills:
 - Symmetrical Tonic Neck (STNR)
 - Asymmetrical Tonic Neck (ATNR)
 - Acoustic-stapedius
 - Hands Grasp (later phases of development),
 - Hands Pulling
 - Ocular-vestibular and Vestibular-ocular, and Opto-kinetic reflex
 - Vestibular-balance control patterns
 - Tonic Labyrinthine Reflex (TLR; space orientation and reversed gravity issues)
 - Fear Paralysis
13. Explore how these reflexes are involved in motor programming and control, and emotional and behavioral responses.
14. Explain how the repatterning techniques and exercises for these reflex patterns are necessary to create a sufficient neurophysiological basis for development of inner control for cognitive skills – focusing, decoding, memorizing and thinking.
15. Explore how these reflexes are involved in inner control and the social-behavior system.
16. Describe the basis for the development of inner control, cognitive fine motor coordination, speech, self-regulation, and self-management through role-playing games.
17. Describe the basis for the formation of primary coordination: kinesthetic memory emotional response, Moro and Fear Paralysis and protection, positive memory activation and the creation of the anchors.
18. Explain why protection, fear and amygdala interactions as a reason for challenging behavior.
19. Demonstrate the facilitation of non-cortical (non-classical) auditory perception and processing using developmental potentials of basal ganglia, thalamus and amygdala through reflex patterns development.

20. Explain the basis for the formation of motor-cognitive coordination and fine motor skills: cognitive differentiation-memory anchoring, hand-eye, hands-auditory-articulation system, and auditory-vestibular system.
21. Explain and demonstrate innovative techniques for improvement of the functions of coordination systems, such as: Hand eye coordination, Hands: Palm, fingers, thumb – eyes coordination (in space), Eyes-Tongue coordination, Visual decoding of visual-fine motor orientation, Core - upper limbs – lower limbs orientation.
22. Investigate examples of games and activities to enhance the MNRI® process integration exercises in an interesting and motivating manner.
23. Develop individual programs using this MNRI® Program to repattern, activate, and integrate these reflex patterns.
24. Explore the possibilities of positive changes in body structure, posture, movements, emotional and cognitive presence, and behavior.

Course Hours: 24

Course Agenda:

Hour 1: Neurosensorimotor Reflex Integration basis for the successful support of individuals with dyslexia

Hour 2: MNRI® and dyslexia support

Hour 3-4: Reflex Circuit

Hours 5-7: Studying Abilities

Hours 8-9: Types of Dyslexia

Hours 10-11: Behavioral-Cognitive Links

Hour 12-15: Reflexes and Techniques

Hour 16-18: Inner Control

Hours 19-20: Challenging Behavior

Hour 21: Motor-Cognitive Coordination

Hours 22-24: Techniques for the functions of coordination systems

Prerequisites:

1. MNRI® Dynamic and Postural Reflex Integration
2. MNRI® Tactile Integration

3. MNRI® Archetype Movements Integration

Financial Disclosure: Tina Marks & Lisa Ortego receives a stipend based upon an enrollment percentage.

Non-financial Disclosure: Tina Marks - No relevant relationship exists.

Lisa Ortego - No relevant relationship exists.

Course Disclosure: *The Svetlana Masgutova Educational Institute has developed and patented a licensed technology trademarked as MNRI®. Because there are no other like-kind products available, course offerings will only cover information that pertains to the effective and safe use of the above-named products. This presentation will focus exclusively on MNRI® and will not include information on other similar or related products or services.*

Special Needs Requests: If you require special accommodations, please notify SMEI at events@masgutovamethod.com at the time of registration so that needed accommodations can be made prior to the course.

Target audience:

Speech Language Pathologists, Speech Language Pathologist Assistants, Occupational Therapists, Certified Occupational Therapy Assistants, Nurses, Physical Therapists, Physical Therapist Assistants, Educators, Psychologists, Physicians, Massage Therapists, Mental Health Counselors, Other Health Care Providers, Parents.

Criteria for Certificate of Completion and any available Credit Hours or CEUs:

- Full attendance to the entire course
- Participation in practice with instructor feedback
- Post course evaluation



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