

Article

Integration exercise programme for children with learning difficulties who have preserved vestigial primitive reflexes

September 2017 · Acta Neuropsychologica 15(3)
15(3)

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Abstract

Background: The main goal of the research was to determine the usefulness of the Integration exercise programme stimulating development in children with learning difficulties who have preserved vestigial primitive reflexes. Their symptoms included weak motor and visual-motor coordination, lowered visual and auditory analysis and synthesis which resulted in difficulties in reading and writing, disrupted emotional development, psychomotor hyperactivity, weak concentration and other symptoms. **Material/Methods:** 104 children with learning difficulties and other accompanying symptoms took part in the experiment. The children were trained in the shape of the Integration exercise programme at school under a therapist's supervision and additionally at home under parental supervision. The children who went through the whole programme were qualified to the experimental group and those who resigned from the programme after a short period of time – to the control group. A pre-test and a post-test, before and after completion of the Integration exercise programme, was used to evaluate the results. **Results:** It was found that the Integration exercise programme is useful in therapy involving facilitation of development in children with learning difficulties, who exhibit various symptoms. Almost all the obtained results were statistically significant. The Integration exercise programme is particularly effective in the case of children exhibiting a whole set of symptoms along with learning difficulties, problems with concentration, weak emotion control, weak motor development, abnormal muscle tension, weak motor coordination. **Conclusions:** The Integration exercise programme widens the range of methods stimulating development and the range of possibilities to apply the therapy practiced in psychology, pedagogy and physiotherapy.

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... In addition, McPhillips and Sheehy (2004) uncovered a correlation between uninhibited reflexes and various deficits in a group with the highest level of NMI indicators. In a different study, reading skills considerably improved in a group of children where uninhibited PRs decreased after a specific program of physical exercises (Grzywniak, 2017). ... Studies conducted on the relationship between PRs and RD (Goddard Blythe, 2005; Grzywniak, 2016; Grzywniak, 2017; Jordan-Black, 2005; McClelland et al., 2015; McPhillips et al., 2000; McPhillips & Jordan-Black, 2007; Wahlberg & Ireland, 2005) have examined the tonic labyrinthine reflex (TLR), the asymmetrical tonic neck reflex (ATNR), and the symmetrical tonic neck reflex (STNR). These reflexes are linked to oculomotor functions and changes in muscle tension in different parts of the body during head movements. ...

Developmental Language Disorder and Uninhibited Primitive Reflexes in Young Children[Article](#)[Full-text available](#)

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... Movement tasks strengthen control and self-control functions, attention concentration, endurance, and the ability to exert effort. Working in pairs leads to concrete experiences that teach the child about their self-limits and their partner's perception and develop cooperative skills (Grzywniak, 2017; Melillo, 2011). "Even in the case of milder neurological impairments, movement can be the starting point and the right tool" (Porkolábné Balogh et al., 1996, p. 8). ...

The Efficacy of the Sensorimotor Training Program on Sensorimotor Development, Auditory and Visual Skills of

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... Movement tasks strengthen control and self-control functions, attention concentration, endurance, and the ability to exert effort. Working in pairs leads to concrete experiences that teach the child about their self-limits and their partner's perception and develop cooperative skills (Melillo, 2011; Grzywniak, 2017). "Even in the case of milder neurological impairments, movement can be the starting point and the right tool" (Porkolábné Balogh et al., 1996, p.8). ...

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... This program has studies that endorse both the evaluation and the results of its implementation in different educational centres such as Mellor school, Prince Albert school, Swanwick school, NEELB school in the UK (Blythe, 2005) prior to its official publication (Blythe, 2012), the Care and Educational Complex in Krakow, Poland (Grzywniak, 2016), different public and nonpublic schools in Vlora, Albania (Bilbilaj et al., 2017), and a group of schools in Lower Silesia, Poland (Gieysztor et al., 2018). Implementing the psychoeducational program has led to improvements in motor areas such as balance and movement coordination (Blythe, 2005; Gieysztor et al., 2018), in academic performance through improved reading and learning skills (Bilbilaj et al., 2017; Blythe, 2005; Chinello et al., 2018; Matuszkiewicz & Gałkowski, 2021), and in behavioural difficulties (Bilbilaj et al., 2017; Grzywniak, 2017). ...

Effect of a psychoeducational intervention on motor and perceptual-visual development through the inhibition of

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● Lidia Infante-Cañete · Beatriz Aguilar-Guerrero · ● Agustin Wallace

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... Este programa cuenta con estudios que avalan tanto la evaluación como los resultados de aplicación en diferentes centros educativos como el colegio Mellor, colegio Prince Albert, colegio Swanwick, colegio NEELB en Reino Unido (Blythe, 2005) previo a su publicación oficial (Blythe, 2012), el Complejo de Cuidados y Educativo de Cracovia, Polonia (Grzywniak, 2016), distintas escuelas públicas y no públicas en Vlora, Albania (Bilbilaj et al., 2017) y en un grupo de colegios de Silesia Baja, Polonia (Gieysztor et al., 2018). La implantación del programa psicoeducativo ha obtenido mejoras en áreas motoras como el equilibrio y la coordinación del movimiento (Blythe, 2005; Gieysztor et al., 2018), en el rendimiento académico a través de la mejora de la lectura y las dificultades de aprendizaje (Bilbilaj et al., 2017; Blythe, 2005; Chinello et al., 2018; Matuszkiewicz y Galkowski, 2021) y en las dificultades de conducta (Bilbilaj et al., 2017; Grzywniak, 2017)

Efecto de una intervención psicoeducativa en el desarrollo motor y perceptivo-visual a través de la inhibición de los

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... These exercises improve balance and coordination skills and proprioception (a sense of their own body in space). Grzywniak reported the same finding in her research [34]. Grigg et al. [35] describe the positive effects of using the Rhythmic Movement Training by parents to integrate primary reflexes in children aged 7-12. ...

Primitive Reflex Activity in Relation to Motor Skills in Healthy Preschool Children

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... Even if kinematic parameters are explored in some studies, the symmetry index of pelvis motion has not been found by authors so far. The impact of primitive reflexes on a child's life is still being checked by different kinds of researchers in different disciplines such as psychology, pedagogy, and physiotherapy, where some interventions are being undertaken [38][39][40][41] [42] [43]. This demonstrates the importance of cooperation for child integral understanding and support. ...

Pelvic Symmetry Is Influenced by Asymmetrical Tonic Neck Reflex during Young Children's Gait

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Interference to consolidation phase gains in learning a novel movement sequence by handwriting: Depe...

July 2007 · Experimental Brain Research

Meirav Balas ·  Shai Netser ·  Nir Giladi · Avi Karni

Practice on a novel sequence of movements can lead to two behavioral expressions of procedural memory consolidation processes: delayed performance gains evolving hours after the termination of training, but also a decrease in the susceptibility of the training-related gains to interference by subsequent experience within a few hours following training. It is not clear what types of experience ...

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Metacognition in Motor Learning

August 2001 · Journal of Experimental Psychology Learning Memory and Cognition

 Dominic A Simon ·  Robert A. Bjork

Research on judgments of verbal learning has demonstrated that participants' judgments are unreliable and often overconfident. The authors studied judgments of perceptual-motor learning. Participants learned 3 keystroke patterns on the number pad of a computer, each requiring that a different sequence of keys be struck in a different total movement time. Practice trials on each pattern were ...

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Resistance to cognitive impairment under alcohol: The role of environmental consequences

September 1997 · Experimental and Clinical Psychopharmacology

 Mark Fillmore · M Vogel-Sprott

This study showed that cognitive impairment under alcohol is affected by environmental factors. Forty male social drinkers were randomly assigned to 4 groups. Participants practiced a task that measured their rate of information processing. Three groups then performed the task under a moderate dose of alcohol (0.62 g/kg) and received either an immediate, informative monetary consequence (MI); a ... [\[Show full abstract\]](#)

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Heart rate responses to real and simulated BA Hawk MK 51 flight

August 1997 · Aviation Space and Environmental Medicine

H Ylönen ·  Heikki Lyytinen ·  Tuomo K Leino · [...] ·  Pentti Kuronen

The effects of psychological workload on inflight heart rate were studied in five experienced (flight instructors) and five less experienced (cadets) military pilots of the Finnish Air Force (FAF). The subjects performed the same flight mission twice; first with the BA Hawk MK 51 simulator with minimal G-forces and after that with the BA Hawk MK 51 jet trainer with Gz-forces below +2. The mission ... [\[Show full abstract\]](#)

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