



**Digital Magazine for Pediatric
Occupational and Physical Therapy**

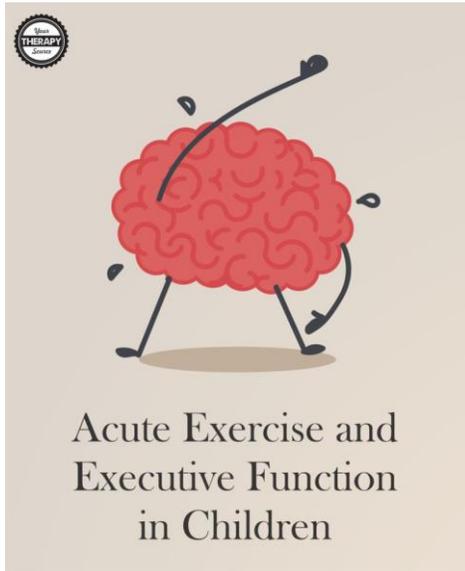
February 2017 Issue 91

Table of Contents

Your Therapy Source Digital Magazine February 2017

ACUTE EXERCISE AND EXECUTIVE FUNCTION IN CHILDREN.....	3
PHYSICAL THERAPY INTERVENTIONS AND DEVELOPMENTAL COORDINATION DISORDER	4
15 FREE VISUAL SPATIAL PRINTABLES	5
VISUAL MOTOR INTEGRATION SKILLS AND SPEECH SOUNDS	6
AEROBIC EXERCISE IMPROVED SELF REGULATION AND BEHAVIOR.....	7
EFFECTS OF TABLET USE ON FINE MOTOR SKILLS	8
SENSORY MODULATION, ANXIETY AND RITUAL BEHAVIORS	9
10 FUN ACTIVITIES FOR KIDS TO WORK ON SHOULDER STRENGTHENING	11
MANAGEMENT OF SCOLIOSIS IN CHILDREN WITH CEREBRAL PALSY	12
MOTOR COORDINATION AND ACADEMIC ACHIEVEMENT	15
VISUAL MOTOR CONNECTIONS WHEN TRACING, HANDWRITING AND TYPING.....	16
CLAP, SNAP OR TAP – RHYTHM, MOTOR PLANNING AND COORDINATION ACTIVITY	17
WINTER CHALLENGE – SENSORY MOTOR ACTIVITY	18
FIGURE GROUND AND SPATIAL REASONING ACTIVITIES.....	19
VALENTINE’S DAY SENSORY MOTOR FREEBIES.....	20

ACUTE EXERCISE AND EXECUTIVE FUNCTION IN CHILDREN



Psychophysiology published research on the effects of acute exercise on executive function in 20 healthy, 8-10, year old children. This study compared the effect of an acute bout of continuous or intermittent, moderate-intensity treadmill exercise on executive function in young children. Participants in the continuous exercise group ran at 90% of gas exchange threshold whereas the participants in the intermittent exercise group performed six consecutive 2.5 min blocks of exercise. The intermittent exercise block was designed to reflect children's typical activity patterns, comprising 45 s at a heavy intensity, 33 s at a moderate intensity, 10 s at a severe intensity, and 62 s at a low intensity.

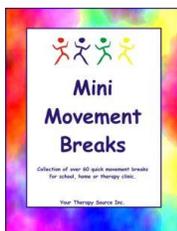
Assessment of executive function included the Stroop task before the submaximal exercise bouts and after, at 1-, 15-, and 30-min intervals and near-infrared spectroscopy (NIRS) to measure cerebral perfusion and oxygenation.

The results indicated that:

- in both conditions, Stroop performance was improved at 1 min after compared to before and the improvements were maintained until 30 min after.
- NIRS (oxyhemoglobin, total hemoglobin) explained a significant amount of variance in the change in Stroop performance for the intermittent group only.

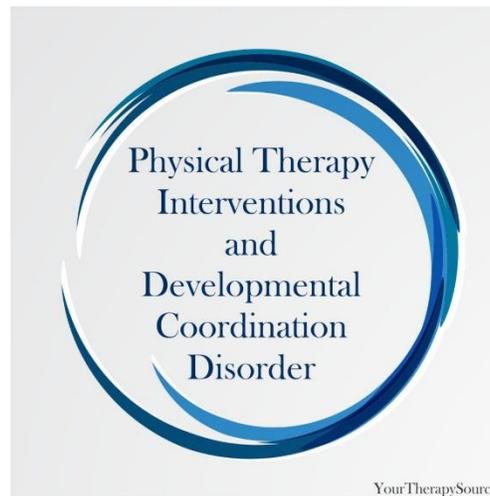
The researchers concluded that an acute bout of exercise, of either an intermittent or continuous nature, improves executive function in children, and effects are maintained for ≤ 30 min following exercise cessation. Therefore, it is recommended that children should participate in bouts of physical activity during the school day.

Reference: Lambrick, D., Stoner, L., Grigg, R. and Faulkner, J. (2016), Effects of continuous and intermittent exercise on executive function in children aged 8–10 years. *Psychophysiology*, 53: 1335–1342. doi: 10.1111/psyp.12688



[Mini Movement Breaks](#) – This download is a collection of 60+ quick sensory motor activity cards. The mini movement breaks are quick and require no equipment. The movement breaks can be done indoors. Most of the movement breaks can be done with one child or a group of children. It does not get any easier than this to encourage sensory motor activities in the classroom or home. [FIND OUT MORE INFORMATION.](#)

PHYSICAL THERAPY INTERVENTIONS AND DEVELOPMENTAL COORDINATION DISORDER



The *Journal of Motor Learning and Development* published a review to identify the types of interventions in physical therapy contexts used in children with developmental coordination disorder (DCD) and whether these interventions are effective. The systemic search revealed 29 articles of moderate to good quality to analyze. The results indicated that:

- task-oriented approaches as well as motor skill training–based interventions have shown beneficial effects in improving motor function in children with DCD.
- physical therapy interventions were effective compared to inaction.

The researchers recommend the use of task-oriented and traditional physical therapy interventions for children with DCD with clear goals and outcome measures for individual children.

Reference: Offor, N., Ossom Williamson, P., & Caçola, P. (2016). Effectiveness of Interventions for Children With Developmental Coordination Disorder in Physical Therapy Contexts: A Systematic Literature Review and Meta-Analysis. *Journal of Motor Learning and Development*, 4(2), 169-196.



[25+ Bilateral Coordination Exercises](#) Download of 28 bilateral coordination exercise sheets including QR codes with links to video demonstration of exercises. Also includes hand out explaining bilateral coordination. [Find out more information.](#)

15 FREE VISUAL SPATIAL PRINTABLES



The ability to determine spatial relationships is important in everyday tasks. You need to interpret what it means to “stand first in a line”, “sit in front of Johnny” or “put the pencil on top of the paper”. If a child has difficulty perceiving spatial relationships it can affect motor skills, body awareness, problem solving, activities of daily living and overall performance in school.

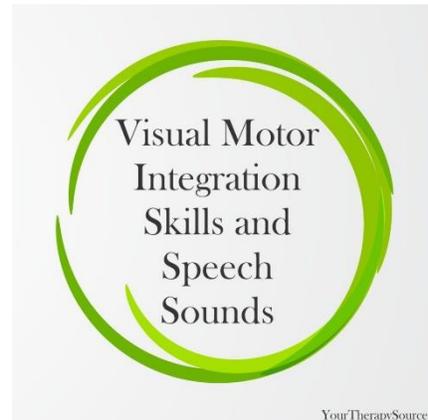
This is a list of 15 FREE visual spatial and visual motor printables from Your Therapy Source.

1. [Brick Design Activity Pages](#)
2. [Visual Spatial Dog Maze](#)
3. [Move Like Me Freebie](#)
4. [Eggsactly the Same](#)
5. [Road Puzzler](#)
6. [Frog Grid Drawing](#)
7. [Color Copy Challenge](#)
8. [Boat Tangram](#)
9. [Simon Says Freebie](#)
10. [Find the Mouse](#)
11. [Puzzles on Paper Freebie](#)
12. [Fishy Fishy Graphing Game](#)
13. [Mosaic Fish](#)
14. [Graph Paper Drawing Freebie](#)
15. [Connect Puzzle Freebie](#)

[Check out more seasonal and holiday visual perceptual activities and printables!](#)

VISUAL MOTOR INTEGRATION SKILLS AND SPEECH SOUNDS

Perceptual and Motor Skills published research on visual motor integration skills in children with speech sound disorders (SSD). A SSD is defined as a “persistent difficulty with speech sound production that interferes with speech intelligibility or prevents verbal communication of messages”. Visual motor integration (VMI) is defined as the coordination of visual and motor functioning, which is closely related to academic skills. Since visual input plays an important role in learning the phonological structure of language, children use multimodal information to determine how to produce a sound by perceiving speech spoken both by themselves and others.



The participants included 65 Turkish children aged from 5 to 6½ years old (31 with speech sound problems and 34 age matched controls without speech problems). Each child was evaluated with the Ankara Articulation Test for evaluating speech sound skills and the Beery-Buktenica Developmental Test of Visual Motor Integration with its supplemental tests of Visual Perception and Motor Coordination.

The results indicated that the children with SSD scored significantly lower than the control group in Visual Motor Integration, Visual Perception, and Motor Coordination.

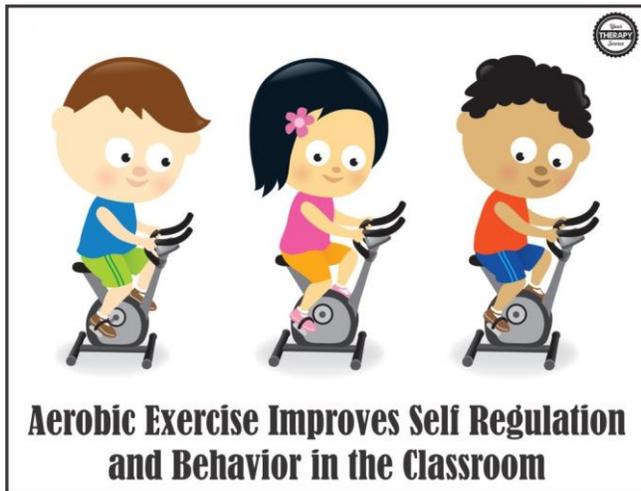
The researchers recommend that if a child has SSD there may be visual motor deficits. Even though phonological errors are a natural part of the developmental process, visual motor skills should be examined if the child’s speech sound development falls within a very low percentile.

Reference: Ercan, Z. G., Yilmaz, Ş., Taş, M., & Aral, N. (2016). Investigation of Visual Motor Integration Skills in Children With Speech Sound Problems. *Perceptual and motor skills*, 0031512516664894.



[Visual Motor Collection](#): The 10 visual motor titles includes: Visual Motor Workbook, Visual Motor Exercises, Hole Punch Palooza, Patterns, Follow the Path, VINGO Visual Motor Bingo, Graph Paper Drawings, Letter/Shape Mazes, Grid Drawings and Penguin Pencil Challenges. Get 50% off for this collection of 10 titles via immediate download. [FIND OUT MORE](#).

AEROBIC EXERCISE IMPROVED SELF REGULATION AND BEHAVIOR



Pediatrics published research to determine if structured aerobic exercise during physical education (PE) resulted in improvements in behavioral self-regulation and classroom functioning among 103 children (ages 7-16 years old) with students with autism, attention deficit hyperactivity disorder, anxiety and mood disorders.

Over a 14-week crossover design, students were randomly assigned to receive the 7-week aerobic cybercycling

PE curriculum or standard nonaerobic PE. The cybercycling phase had children use the bikes 2 times per week during 30- to 40-minute PE classes.

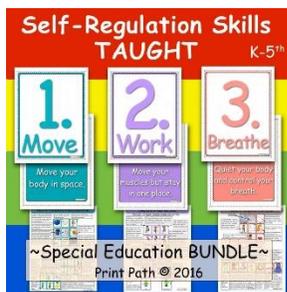
The results indicated that following the aerobic intervention phase, children experienced 32% to 51% lower odds of poor self-regulation and learning-inhibiting disciplinary time out of class. The effects were more pronounced on days that children participated in the aerobic exercise where disruptive behaviors dropped over 70 percent, but carryover effects were also observed.

References:

Bowling, A. et al. Cybercycling Effects on Classroom Behavior in Children With Behavioral Health Disorders: An RCT. *Pediatrics* Jan 2017, e20161985; DOI: 10.1542/peds.2016-1985

Heasley, S. Study: Exercise May Cut Behavior Issues In Half. Retrieved on 1/12/2017 from <https://www.disabilitycoop.com/2017/01/10/study-exercise-behavior-half/23166/>

Self Regulation Skills Curriculum: Move – Work – Breathe – This curriculum provides an effective, time-efficient structured system to provide classroom breaks, improve self-awareness and self-advocacy and teach specific self-regulation skills so that kids have tools to use in their classrooms. This system will get kids moving, give them the benefits of a brain power boost [from getting their heart rate up], give them heavy body work and isometrics to help them calm down, and help them learn techniques to quiet and control their bodies in order to return to their academic work. [FIND OUT MORE.](#)



EFFECTS OF TABLET USE ON FINE MOTOR SKILLS

Physical & Occupational Therapy in Pediatrics published research on 80 children (mean age = 60.1 months) to determine the effects of touch-screen tablet use on the fine motor development of preschool children without developmental delay. The children were placed in two different groups. One group of 40 children, who used a touch-screen tablet more 60 minutes per week for at least 1 month, received a 24-week home fine motor activity program using a touch-screen-tablet. The other group of 40 children, matched for age and sex, who did not meet the criteria for previous tablet use received a 24-week program consisting of manual play activities. Following the intervention, the Bruininks–Oseretsky Test of Motor Proficiency was used to measure motor skills.

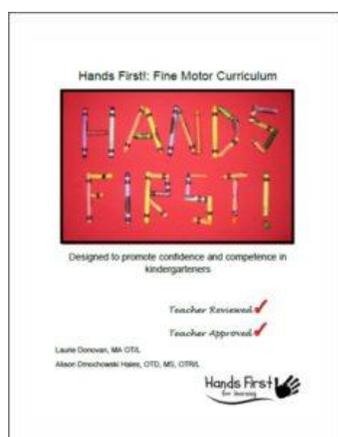


Data analysis indicated the following:

- pretest analysis showed no group differences in motor performance and pinch strength.
- posttest scores showed children in the nontouch-screen-tablet group made significantly greater changes in fine motor precision, fine motor integration, and manual dexterity.

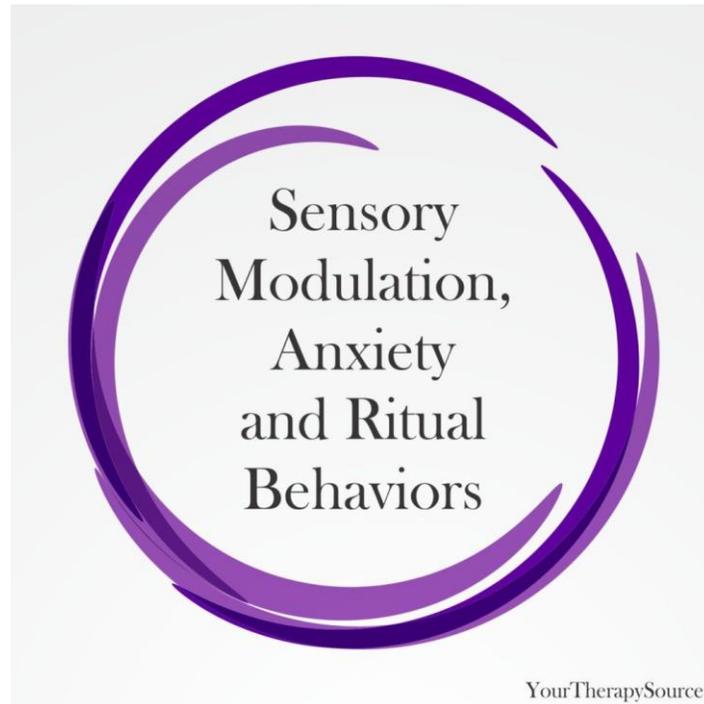
The researchers concluded using a touch screen tablet extensively might be disadvantageous for the fine motor development of preschool children.

Reference: Ling-Yi Lin, Rong-Ju Cherng & Yung-Jung Chen. Effect of Touch Screen Tablet Use on Fine Motor Development of Young Children. *Physical & Occupational Therapy In Pediatrics*. Published online: 10 Jan 2017. <http://dx.doi.org/10.1080/01942638.2016.1255290>



The *Hands First! Fine Motor Curriculum* is a new, comprehensive, evidenced based program backed by preliminary research that demonstrates its effectiveness in helping students gain in fine motor and fine motor foundation (gross motor) skills. Written for preschool, kindergarten and first grade students, this complete program can be utilized by both therapists and teaching staff. Kids love the activities! Administrators are impressed that the program is written as a curriculum that can be implemented by teaching staff. [FIND OUT MORE.](#)

SENSORY MODULATION, ANXIETY AND RITUAL BEHAVIORS



What comes first – difficulties with sensory modulation, anxiety or ritual behaviors? In children, it can be very hard to determine how the three are all inter-connected if at all. The *Journal of Physical and Occupational Therapy* published research investigating the relationships between sensory responsiveness, anxiety, and ritual behaviors in 48 boys (ages 5-9) with typical and atypical sensory responsiveness. Twenty eight of the boys had atypical sensory responsiveness which was defined as a score of ≤ 154 on the Short Sensory Profile. Data was collected using the Sensory Profile (parents completed), the Screen for Child Anxiety Related Emotional Disorders, and the Childhood Routines Inventory.

The results indicated the following:

- children with atypical sensory responsiveness had significantly higher levels of anxiety and a higher frequency of ritual behaviors than controls.
- atypical sensory responsiveness was significantly related to both anxiety and ritual behaviors with anxiety mediating the relationship between sensory modulation and ritual behaviors.

The researchers concluded that there are potential consequences of atypical sensory responsiveness. These consequences could support the idea that ritual behaviors develop as a coping mechanism in response to anxiety stemming from primary difficulty in modulating sensory input (Bart, 2016).

Previous studies have indicated a relationship between anxiety, sensory processing and rituals. One study indicated a high rate of sensory over-responsivity (SOR) occurrence in a sample of children seeking anxiety treatment, suggesting that SOR may not be entirely independent of anxiety and may be closely associated with OCD (Coneea, 2014). Whereas another study reported that SOR is a dimensional feature that can influence the severity of obsessive compulsive symptoms and may characterize a unique sensory OCD subtype (Ben-Sasson, 2017). Finally, there may be a strong relationship between sensory sensitivity, childhood ritualism and adult OCD symptoms with oral and tactile hypersensitivity in childhood being a pathway to adult OCD (Dar, 2012).

So it goes back to the original question of the post – which comes first?

**What? Why?
and How?**
Series 3

Sensory Processing
Proprioception
Vestibular System
Tactile System
Sensory Registration
Sensory Modulation
Sensory Defensiveness
Sensory Diet
Self Regulation
Dyspraxia

Your Therapy Source Inc

The [What? Why? and How? series](#) helps to explain different topics to students, parents and teachers. Each hand out includes a definition of what the topic is, why it is important and how you can help.

[What? Why? How? Series 3](#) includes one page hand outs on the following topics: Sensory Processing, Proprioception, Vestibular System, Tactile System, Sensory Registration, Sensory Modulation, Sensory Defensiveness, Sensory Diet, Self Regulation and Dyspraxia.

[FIND OUT MORE.](#)

References:

Bart, O., Bar-Shalita, T., Mansour, H., & Dar, R. (2016). Relationships among Sensory Responsiveness, Anxiety, and Ritual Behaviors in Children with and without Atypical Sensory Responsiveness. *Physical & Occupational Therapy In Pediatrics*, 1-10. Chicago

Ben-Sasson, A., & Podoly, T. Y. (2017). Sensory over responsivity and obsessive compulsive symptoms: A cluster analysis. *Comprehensive Psychiatry*, 73, 151-159.

Conelea, C. A., Carter, A. C., & Freeman, J. B. (2014). Sensory over-responsivity in a sample of children seeking treatment for anxiety. *Journal of developmental and behavioral pediatrics: JDBP*, 35(8), 510.

Dar, R., Kahn, D. T., & Carmeli, R. (2012). The relationship between sensory processing, childhood rituals and obsessive-compulsive symptoms. *Journal of behavior therapy and experimental psychiatry*, 43(1), 679-684.

10 FUN ACTIVITIES FOR KIDS TO WORK ON SHOULDER STRENGTHENING



Stability at the shoulder muscles is an essential component for coordination, postural control and fine motor skill development. Shoulder stability and strength are necessary for skills such as [handwriting](#), [playing catch](#), reaching, picking up small objects and more. Basically, anytime you move your hand and fingers you need your shoulder to either stabilize or actively contract. Here are 10 playful, fun activities to work on shoulder strengthening for kids:

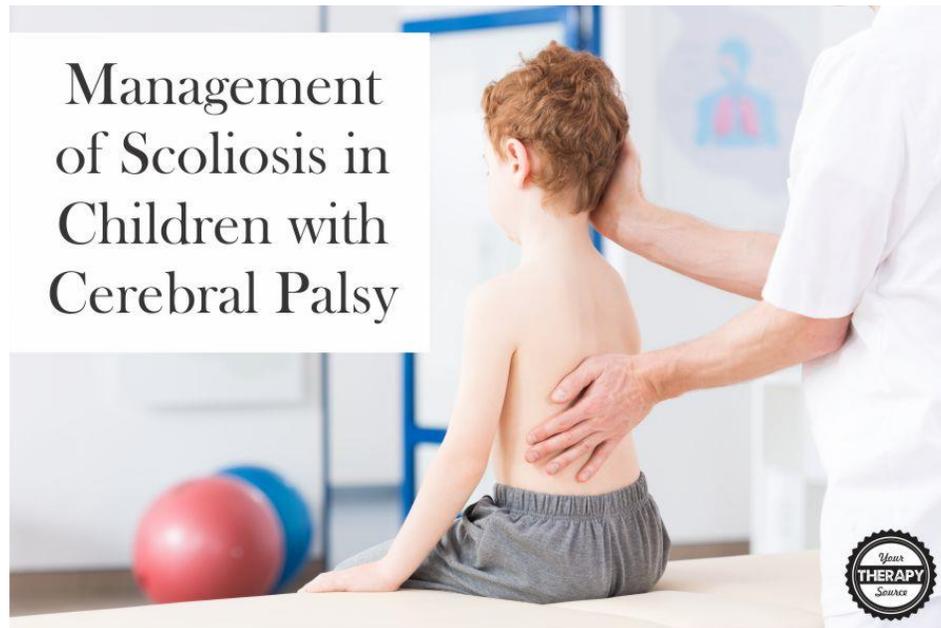
1. Monkey Bars – my personal favorite!
2. Climbing trees or playground equipment ie ladders, ropes and rock walls
3. Wheelbarrow walking with a friend or over an exercise ball
4. [Animals walks](#) where the child has to weight bear through the arms and hands such as bear walk, seal walk or donkey kicks
5. [Balloon volley](#) keeping the balloon overhead
6. [Yoga poses](#)
7. Jumping rope – holding the shoulders steady while you move the rope provides excellent isometric contraction (stability) of the shoulder muscles
8. Washing windows, table tops and desks – kids really do love to help wash down (adults not so much haha!)
9. Playing catch with a large exercise ball or a weighted ball
10. [Drawing, writing or coloring on a vertical surface](#)

What is your favorite, playful shoulder strengthening activity for kids?



[Play Strong: Activities to Promote Muscle Strengthening in Children Through Play](#) – This is a collection of 40+ activities that promote muscle strengthening in children. The activities are great for children with varying abilities. [FIND OUT MORE.](#)

MANAGEMENT OF SCOLIOSIS IN CHILDREN WITH CEREBRAL PALSY



The *Journal of Spine Surgery* published an open access review on the management of scoliosis in children with cerebral palsy (CP). Research indicates that 21-64% of children with CP develop scoliosis most likely to occurring before 10 years of age. In children with CP, scoliosis can progress beyond skeletal maturity which is different from idiopathic scoliosis.

The development of scoliosis is related to the the child's level of disability. Research indicates the following:

- statistically significant relationship between Gross Motor Function Classification System (GMFCS) level and development of scoliosis with 50% of children GMFCS IV–V developing a severe scoliosis.
- Cobb angle of greater than 40 degrees at an early age has been found to predict significant progression of a CP scoliosis.
- inverse relationship between development of scoliosis and ambulation with the least mobile children at greatest risk.

The rate of progression of scoliosis varies:

- in the adult, largely non ambulatory population, progression can range between 3.0 – 4.4 degrees per year.
- according to size of curve; larger curves (>50 degrees) have been shown to progress almost twice as fast than smaller curves.
- curves were most likely to progress GMFCS IV and V.

MANAGEMENT OF SCOLIOSIS IN CHILDREN WITH CEREBRAL PALSY

There are two patterns of scoliotic curves in individuals with CP:

- Group-I curves can be considered double curves with a thoracic and lumbar component and occurred most often in ambulatory patients, with minimal pelvic obliquity.
- Group-II curves are single curves in either the thoracic or lumbar spines and were of greater magnitude. They occur more frequently in quadriplegic patients and almost all display significant pelvic obliquity.

There are several approaches to the non-surgical management of scoliosis in children with CP:

- Bracing – there is mixed evidence to support this approach. There is evidence to support bracing to assist with sitting balance and trunk support, providing better control of the head, neck and arms. Some research suggests bracing may slow curve progression, particularly in younger patients with curves less than 40 degrees. Although other research has reported limited success and recommend bracing as an interim measure before surgical correction.
- Seating and positioning has been shown to provide increased support and improve functional outcomes although there are limited studies on the specific effects of seating systems on correction of spinal deformity. One study indicated that the placement of a 3-point system of lateral support pads was shown to offer a more symmetrical trunk posture and correct curve angles by 35% in non-ambulatory CP patients with scoliosis.
- Botulinum toxin injection – one small study indicated that it did not worsen scoliosis and provided some reduction in magnitude of the curve in all patients.
- Intrathecal baclofen (ITB) – there is conflicting evidence regarding ITB pumps. Some research indicated a significant increase in Cobb angle was observed following ITB pump insertion although other studies have shown there to be no difference in progression of scoliotic curves.

Currently, research indicates that surgery is the only option for the definitive management of scoliosis in CP. The goal of surgical correction is a balanced spine, prevention of curve progression and improvement in quality of life. Surgery should be considered in individuals with CP who have:

1. large curves (>50 degrees).
2. scoliosis progressing beyond skeletal maturity.
3. significant curves resulting in functional or physiological disturbance.

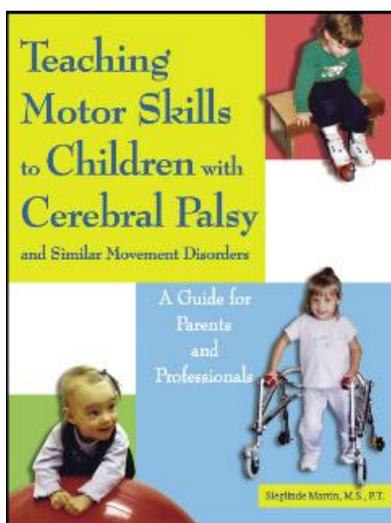
Following surgical correction, outcomes are varied. Survey following surgery indicate a high level of satisfaction with up to 99% of parents being satisfied with the outcome of the procedure with 85–94% willing to consider surgical intervention for their children

MANAGEMENT OF SCOLIOSIS IN CHILDREN WITH CEREBRAL PALSY

again. Although other research suggests that surgery provides no improvement in function, school attendance or co-morbidities but improvement in postoperative quality of life has been reported. There is high risk of postoperative complications following surgical correction.

The decision making for the management of scoliosis in children with CP should be on an individual basis, with involvement of the physician, child, family and wider members of the multi-disciplinary team.

Reference: Cloake, T., & Gardner, A. (2016). The management of scoliosis in children with cerebral palsy: a review. *Journal of Spine Surgery*, 2(4), 299-309. Read the full text here <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5233861/>



[Teaching Motor Skills to Children with Cerebral Palsy and Similar Movement Disorders – A Guide for Parents and Professionals](#) is a must have reference for all therapists who work with children with cerebral palsy. Whether you are a beginner or experienced therapist you will find the information concise, informative and very helpful to carry out every day functional tasks including stretching with children with cerebral palsy. The book provides activity suggestions throughout the developmental sequence such as head control, tummy time, sitting, transitions, walking and beyond. There is also great information that reviews additional interventions for children with cerebral palsy such as bracing, surgical and medical management. The author, Sieglinde Martin, is an experienced PT and a mother of a child with cerebral palsy. [Find out more information.](#)

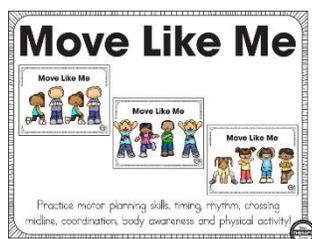
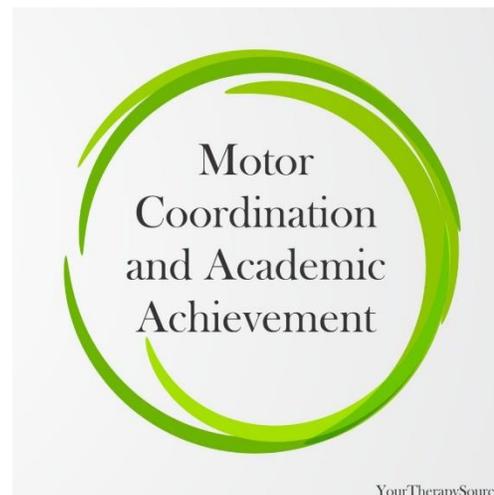
MOTOR COORDINATION AND ACADEMIC ACHIEVEMENT

Frontiers in Psychology published research on the relationship between motor skills, cognitive function, and school performance in 45 students from 8 to 14 years of age. Each participant completed the following to assess different skill areas: 1) Touch Test Disc for motor skill coordination, 2) Shuttle Run Speed—running back and forth for agility, 3) Academic Achievement Test for school performance, 4) the Stroop test for selective attention and concentration, cognitive flexibility and inhibitory control and 5) Six sub-tests of the Wechsler Intelligence Scale for Children-IV (WISC-IV) for cognitive function. Using a cross sectional design, the results indicated the following:

- the Touch Test Disc was the best predictor of school performance. The Touch Test Disc test requires the individual to keep the non-dominant hand in the rectangle box in the center, then touch with the dominant hand in the circle on the opposite side, crossing his arm over the other, and come back to complete one cycle. It is scored by measuring the smallest amount of time it takes to complete 25 correct cycles out of three trials.
- significant correlations between motor coordination and several indices of cognitive function, such as the total score of the Academic Achievement Test and two WISC-IV sub-tests: block design and cancellation.
- all the other cognitive variables pointed in the same direction, and even correlated with agility, but did not reach statistical significance.

The researchers concluded that visual motor coordination and visual selective attention, but not agility, may influence academic achievement and cognitive function.

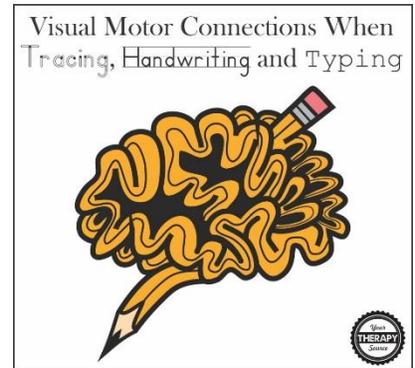
Reference: Fernandes, V. R., Ribeiro, M. L. S., Melo, T., de Tarso Maciel-Pinheiro, P., Guimarães, T. T., Araújo, N. B., ... & Deslandes, A. C. (2016). Motor coordination correlates with academic achievement and cognitive function in children. *Frontiers in psychology*, 7.



[Move Like Me](#) – Digital download includes action poses for children to practice motor planning, crossing midline, body awareness, timing, rhythm, coordination and physical activity. This is a NO PREP activity. Simply print and play or project onto the whiteboard or tablet. [Find Out More Information.](#)

VISUAL MOTOR CONNECTIONS WHEN TRACING, HANDWRITING AND TYPING

Trends in Neuroscience and Education published research examining the visual motor connections in the brain when tracing, handwriting and typing in preschool children. Since handwriting letters has been shown to increase Blood Oxygen Level Dependent (BOLD) signal during letter perception in visual and motor brain regions the researchers investigated functional connectivity by analyzing BOLD data obtained from 4 to 6 year-old children after learning symbols through handwriting, tracing, or typing.



The data analysis revealed that functional conditions between:

- visual and parietal regions increased after all training conditions.
- visual and ventral frontal regions increased after handwriting training with letters more than shapes.
- visual and dorsal frontal motor regions increased more after handwriting than typing letters.

The researchers concluded that visual-motor training creates functional connections among visual and motor brain regions that reflect different aspects of the handwriting experience.

Reference: Vinci-Booher, S., James, T. W., & James, K. H. (2016). Visual-motor functional connectivity in preschool children emerges after handwriting experience. *Trends in Neuroscience and Education*, 5(3), 107-120.

Need handwriting resources? Check out these titles:

[The Handwriting Book](#)
[Handwriting Stations](#)
[Handwriting Heroes Program](#)
[Handwriting Bundle – HWT Style](#)

Need visual motor resources? Check out these titles:

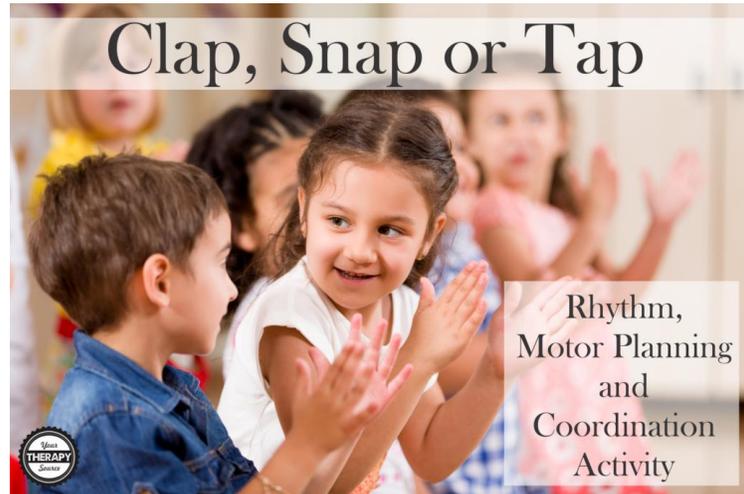
[Visual Motor Exercises](#)
[Patterns, Patterns, Patterns](#)
[Visual Motor Collection – 50% Off!](#)

Need keyboarding resources? Check out: [Keyboarding Rubrics](#)

CLAP, SNAP OR TAP – RHYTHM, MOTOR PLANNING AND COORDINATION ACTIVITY

Have you ever stopped to think how many sounds you can make with your body? You can clap, snap, tap, stomp, click and more. These skills challenge children's motor planning, rhythm and coordination skills. Have children make some sounds with their bodies such as:

1. clapping hands together
2. snapping fingers
3. tapping fingers on table
4. slapping knees
5. tapping top of head
6. stomping feet
7. rubbing hands together
8. popping air filled cheeks
9. tapping two fingers on palm of hand
10. rubbing hands on floor.



Once the children have practiced these sounds try mixing it up to follow a two step pattern: Clap hands – slap knees – clap hands – slap knees – clap hands – slap knees....

Try adding a rhythm: Clap 2x – stomp feet 3x – clap 2x – stomp feet 3x...

Make it more difficult by trying a three-step pattern: Clap hands – tap top of head – snap fingers – clap hands – tap top of head – snap fingers...

Encourage the children to maintain a rhythm as they complete the body sounds. This is a great brain break or indoor recess activity that requires no equipment and concentration.

Need more NO PREP, NO EQUIPMENT sensory motor group activities? Get [25 instant sensory motor activity ideas](#) for your group sessions. The ideas require absolutely NO equipment, just a little imagination and fun. These activities allow you to get your group off to an immediate, productive start taking full advantage of your students' desire to move. Find out more information about [25 Instant Sensory Motor Group Activities](#).

WINTER CHALLENGE – SENSORY MOTOR ACTIVITY

WINTER CHALLENGE
Can you complete all the challenges on this page in under 2 minutes?

TRACE BOTH SKI TRACKS DOWN THE MOUNTAIN WITH A PENCIL.

DRAW 4 MORE SNOWFLAKES.

WALK AROUND THE ENTIRE ROOM BACKWARDS.

PRETEND TO ICE SKATE ONE TIME AROUND THE ROOM.

SET ON THE FLOOR AND HOLD YOUR ARMS AND LEGS IN AIR FOR A COUNT OF 10 SECONDS.

FINISH THE SNOWMAN BY DRAWING A MIDDLE CIRCLE, HEAD CIRCLE, EYES, NOSE, MOUTH AND HAT.

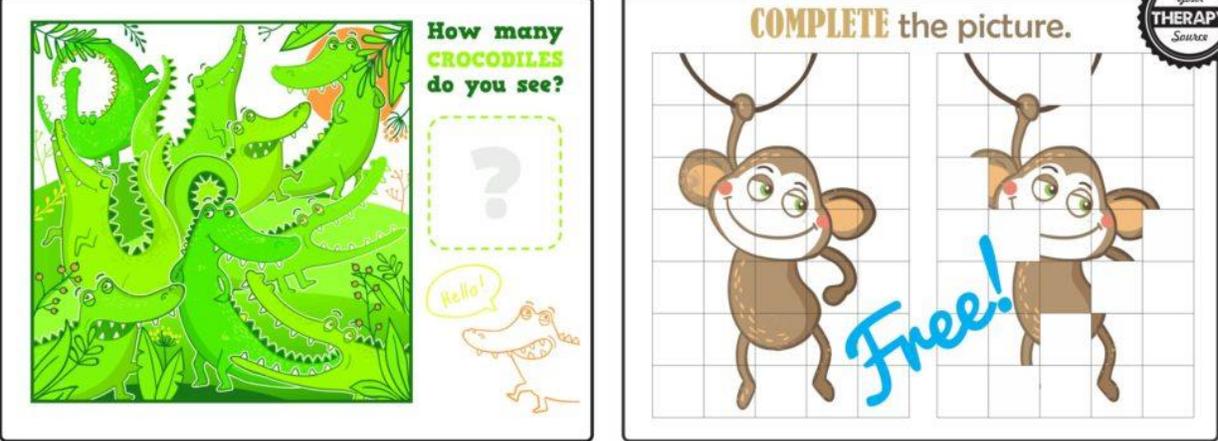
Your THERAPY Source
© Your Therapy Source Inc

Winter Challenge is a fun, NO PREP, [Winter themed](#) activity to encourage fine motor, gross motor and visual motor skills. Just print the black and white page and complete each of the Winter themed challenges. Can you trace the ski tracks, draw snowflakes, walk backwards, pretend to ice skate, hold snow tube pose and finish drawing a snowman in under two minutes? Use this activity during a brain break, indoor recess, OT session, PT session and/or carry over of therapy activities. This freebie is from the [Winter Packet](#) that includes 25 NO PREP Winter themed fine motor, gross motor and visual perceptual activities. [DOWNLOAD THE FREE WINTER CHALLENGE](#)



[Winter Packet](#) Practice fine motor, gross motor, visual perceptual activities with this NO PREP, fun, Winter themed packet. [FIND OUT MORE INFORMATION](#)

FIGURE GROUND AND SPATIAL REASONING ACTIVITIES



How many CROCODILES do you see?

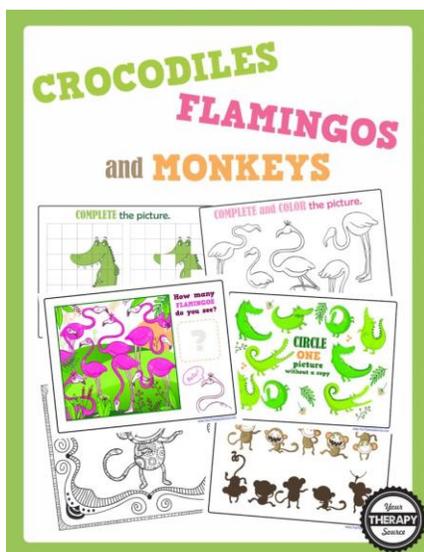
COMPLETE the picture.

Free!

Figure Ground and Spatial Reasoning Activities

These two figure ground and spatial reasoning activities are free from the [Crocodiles, Flamingos and Monkeys Visual Perceptual packet](#). Can you count how many crocodiles are in the picture? This figure ground activity can be printed to provide your students with a visual perceptual challenge. Can you use spatial reasoning and visual motor skills to complete the monkey picture?

[DOWNLOAD 2 FREE Figure Ground and Spatial Reasoning Activities.](#)



[Crocodiles, Flamingos and Monkeys Visual Perceptual Packet](#) – This digital download includes 22 pages of worksheets to practice visual discrimination, spatial reasoning, figure ground, visual closure, form constancy, visual motor skills and coloring. [FIND OUT MORE INFORMATION.](#)

VALENTINE'S DAY SENSORY MOTOR FREEBIES



Valentine's Day Brain Break

I get a kick out of you.
Kick each foot 10 times.

Have a bo
Jump forward.

Yo!
Perform 10

Yo
Do 10 s

You n
Run!

CONVERSATION HEART CHALLENGE

Set Up and Directions: Put 10 conversation hearts next to this paper. Complete all three challenges in under 2 minutes.

CHALLENGE #1:
Make your fingers into a shape of a heart.
Make your arms into a shape of a heart.
Make your legs into a shape of a heart.

CHALLENGE #2:
Use your fingers and stack 10 conversation hearts on top of each other to create a tower. Make the tower in this square.

CHALLENGE #3: Place one conversation heart exactly on top of each conversation heart. The words do not have to match.

IT'S LOVE	FOREVER	HOW NICE	BE SWEET	EMAIL
BE MINE	KISS ME	CALL ME	TRUE LOVE	BE TRUE

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**VALENTINE'S DAY
SENSORY MOTOR FREEBIES**

Here are two fun, NO PREP, Valentine's Day sensory motor freebies! They are from the [Valentine's Day Sensory Motor Packet](#). These two activities are ready to go! Just print and start practicing fine and gross motor skills. The Valentine's Day Brain Breaks is a great group activity to get heart rates up. The Conversation Heart Challenge encourages fine motor skills and graded control to see if you can complete the challenges in under 2 minutes.

[DOWNLOAD THE Valentine's Day Sensory Motor freebies.](#)

[Valentine's Day Sensory Motor Packet](#) – Practice fine motor, gross motor, visual perceptual activities with this NO PREP, fun, Valentine themed packet. This is an excellent activity packet for in class activities, therapy sessions, Valentine's Day parties, carry over activities, brain breaks, early finishers and indoor recess. [FIND OUT MORE.](#)



Valentine Packet

LOVE HEARTS
CONVERSATION HEART CHALLENGE
MY HEART BEETS
FOOT FOOT
LET'S GET OUR HEARTS TOGETHER
BEAT THE HEARTS TOGETHER

Practice gross motor, fine motor and visual perceptual skills with 20+ no prep FUN Valentine's Day activities!