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The *Journal of Experimental Psychology* published research examining eye tracking and visual motor skills in young children. The participants included 40 preschool and early elementary school children. Using head-mounted eye tracking methods visual motor skills were directly measured when the children copied familiar (English letters) and unfamiliar (Cyrillic symbols) forms in real time.

The results of the study on eye tracking and visual motor skills in young children indicated the following:

- younger children needed more time to visually process a letter or symbol and initiate a writing action compared with older children despite children of all ages writing letters in a similar amount of time.
- children copied familiar English letters more efficiently than they copied unfamiliar Cyrillic symbols.
- more time and more visual fixations were observed when copying the Cyrillic symbols compared with the English letters.
- children made more visual fixations to less frequently occurring English letters than to more frequently occurring ones.

The researchers concluded that letter recognition is important in the development of automaticity in early handwriting.

Read more on:

[Handwriting and Literacy](#)

[Fine Motor Skills and Reading](#)

[Visual Motor Connections When Tracing, Handwriting, and Typing](#)

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*Multisensory Alphabet Activities* – digital download includes 26 activity pages for each letter of the alphabet plus a bonus rubric to track progress. Research indicates that children need to master four components in order to identify letters: letter recognition – the ability to recognize the shape and size of the letter, letter naming – recognizing that the shape of the letter is associated with a letter name, letter sound knowledge – determining what sound corresponds to the shape or name of the letter and letter writing – the ability to trace or write the letter with a pen in accordance with its shape and direction (Bara & Bonneton-Botte, 2017). Each worksheet addresses each of these components in addition to movement activities. A font similar to the Zaner-Bloser® font is used with dotted lines. [FIND OUT MORE](#).
Are you familiar with the Nintendo Wii? The Wii is a commercially available interactive computer game consisting of fun activities that provide immediate feedback and progress the user to more advanced levels. The WiiFit also comes with a balance board to challenge postural control and balance while measuring success. Using Wii training for children with cerebral palsy may increase motivational level, engagement and practice time.

An investigative study was completed with 20 children with cerebral palsy (ages 6-12) over an 8 week period to determine whether balance and mobility training at home using the Wii Fit was feasible and provided clinical benefits. The results indicated that:

- 99% of the Wii Fit training was completed.
- performance on all games improved.
- parents understood the training and recommended the training.
- muscle strength increased in dorsiflexors, plantarflexors and quadriceps.
- preferred walking speed increased, fast speed increased and distance over 6 min increased.
- independence in participation increased (Chiu et al, 2018).

In a separate study to investigate the effect of Wii training on hand function in 40 children with hemiplegic cerebral palsy, an experimental group received Wii training involving four games for 40 minutes a day, three times a week for 12 weeks plus usual care. The control group only received usual care.

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The results of Wii training for children with cerebral palsy indicated that:

- spasticity in the experimental group decreased by 0.4 out of 4.0 more than the control group measured using the modified Ashworth scale.
- power grip strength increased by 1.6 kg. more than the control group measured using dynamometry.
- pinch grip strength by 1.2 kg more than the control group measured using dynamometry.
- hand function increased by 6 out of 52 more than the control group measured by the Peabody developmental motor scale (El-Shamy & El-Banna, 2018).

The researchers concluded that Wii training may decrease spasticity, increase grip strength, increase hand function and improve balance and mobility in children with cerebral palsy.

Read more on:

Exercise Interventions and Cerebral Palsy

Breathing in Children with Cerebral Palsy

References:


Did you know that research indicates that self-regulation skills develop over time? Did you know that research also shows that self-regulation skills can improve with effective interventions? Research indicates that there are key components of effective interventions for self-regulation. Here are 4 questions regarding effective interventions for self-regulation:

**When is the most effective time to use self-regulation interventions?**

Research indicates that self-regulation interventions are more effective when used at turning points or specific periods of development such as the early childhood years.

**How should self-regulation interventions be used?**

Self-regulation interventions are more effective when involving repeated practice sessions in everyday situations. The skills should increase in difficulty over time. In addition, the interventions should include multiple levels of influence in different contexts.

**What types of children benefit the most from self-regulation interventions?**
Research indicates that the interventions are most effective for children who are at the most risk such as low income or under high amounts of stress.

**What other types of interventions have been shown to be effective in the development of self-regulation skills?**

Mindfulness and yoga have been shown encouraging results to help children develop self-regulation skills.

Read more on [self-regulation here.](#)

Reference:


If you need more ideas to teach self-regulation skills to children [Self Regulation Skills Curriculum](#).

**Self-Regulation Skills Taught:** 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 brainpower boost [from getting their heart rate up, give them heavy 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.](#)

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Grip Strength of Children

Decreased grip strength is frequently present in children referred to occupational and physical therapy. How do you measure the grip strength of children during your evaluations or annual reassessments? Do you use clinical observation to determine if the child’s handgrip strength is poor, fair or normal? Perhaps you assess functional skills to determine grip strength.

Assessing Grip Strength of Children

Accurate information is necessary to determine the degree of strength impairment. The grip strength of children can easily be assessed and compared to normative reference values using a dynamometer. A hand dynamometer is used for routine screening of grip strength and initial and ongoing evaluation of individuals with reduced hand strength. The subjects are asked to perform one submaximal practice trial followed by one maximal trial of 3 to 4 seconds from each hand. The peak force from the one maximal trial is then recorded for each hand.
Research on the Grip Strength of Children

*Pediatric Physical Therapy* published a cross-sectional study that compiled grip strength data from 2706 participants (91% right-hand dominant) ages 3 to 17 years old. The results of the study indicated the following:

- dominant hand was significantly stronger than the non-dominant hand.
- boys were significantly stronger than girls.
- older children were significantly stronger than younger children.
- a significant difference in the strength between the dominant and nondominant sides in 9- to 17-year-olds.
- children younger than 9 years did not have a significant difference in grip strength between the dominant and non-dominant hand.
- greater strength in the dominant hand in boys compared to girls and with each yearly increase in age.

The researchers compiled the data to create normative data for each side (dominant and non-dominant), sex, and age. In addition, regression equations using age and weight as variables of grip strength are provided for each side by sex.

The normative data is included in the research study.


Looking for MORE easy, fun ideas for hand strengthening activities for kids that require little to no equipment and no, extensive preparation? [The Hand Strengthening Workbook here.](www.YourTherapySource.com)

*The Hand Strengthening Exercise Program*, created by Claire Heffron OTR/L and Lauren Drobnjak PT, includes fun and creative hand exercises and activities for kids to help them build strength in the hands and fingers! If you want to help children with activities like handwriting, cutting with scissors, squeezing a glue bottle, or completing clothing fasteners, then hand strengthening exercises may be the place to start.
Play skills are essential for young children with disabilities to practice during early development. Research indicates that play is associated with improved social and communication skills and promotes improved physical and mental health. In addition, play provides opportunities to foster relationships with caregivers and peers. Obviously, there are many different types of play such as dramatic play, toy play, and board game play. There are many benefits of board game play for young children with disabilities although direct instruction may be necessary to improve their play skills.

**Benefits of Board Game Play for Young Children with Disabilities**

One of the primary benefits of board game play for young children is that the games are readily available in early childhood settings, therefore, providing normal contextual play between children with and without disabilities. Most preschool, daycare and home settings have a few simple board games available for play to encourage social interactions. Board games can help to:

- teach social communication among peers.
- teach early academic concepts such as color, shape, letter and number recognition and simple counting skills.
- provide **fine motor skill practice** when manipulating the game pieces.
- offer a meaningful play activity among children.
How to Increase Independent Board Game Play for Young Children with Disabilities

The positive benefits of board game play for young children are clear. Here are several evidence-based suggestions to increase independent board game play in young children with disabilities:

- use a system of least prompts procedure when teaching board game play to young children (read more on how to use prompts effectively here).
- provide visual activity schedules or pictures during board game play.
- provide peer modeling during gameplay.
- offer contingent reinforcement.

Once children learn basic board game play, additional skills can be encouraged for more advanced social skills and higher level academic concepts.

Read more on improving play skills for children with disabilities.


Add in exercise and physical activity to board gameplay – Candy Game Exercises sneaks in some exercises and physical activity while practicing turn taking, color identification, and visual perceptual skills. This download includes 30 exercise cards, 30 regular color cards and the special cards (6 for the older version and 7 for the new version). Use these cards instead of the traditional color cards that come with the Candy Land® game. If you don’t have Candy Land®, there is a Candy Trail game included that you can print and use with the cards. Find out more information.
Playtime helps all children develop communication, social, cognitive, and motor skills. For children with autism, difficulties with language, social skills, and motor skills may be present. In addition, pretend play skills can be delayed. Parents, teachers, and therapists need to learn how to facilitate play skills in children with autism. Peer-mediated intervention can be used to promote child engagement and learning.

**Play Skill Development During Typical Development**

Children move along a continuum to develop play skills. Infancy begins with sensorimotor exploration play. Around 9-12 months, children begin to learn the functional use of objects in her or his environment. At 12 months functional pretend play emerges. From 12-24 months, pretend play becomes more complex play schemes. Around 24 months, children have a range of functional play acts, use object substitution, and play acts can be directed toward others. Narrative based play emerges around 30 to 42 months with children relying less on the use of props and more on the use of language to narrate play, taking on varying play roles, and integrating several play schemes into one play episode with many characters and participants.

Young children with autism may exhibit difficulties in determining the functional use of objects, creating complex play schemes, using object substitution and advancing play schemes.
Using Peers to Support Play Skill Development in Young Children with Autism

When using peers to support play skill development in young children with autism the research indicates that two peers (or a higher ratio) to one child with autism is recommended. In addition, any child with autism regardless of ability can benefit from peer-mediated play. Once play goals have been established work on the following:

- including a large variety of toys that can facilitate a range of play skills i.e. pretend play props, balls, blocks, trains, puppets, bubbles and more.
- selecting peers that: share common interests, have age appropriate communication skills and a variety of boys and girls.
- pre-training the peers if necessary to: familiarize them with some of the ways the children with autism may communicate and review the roles of the peers (help classmates, guide play but not direct play and keep trying).
- providing adult support to aid with peer-mediated play encouraging natural play experiences.

Keep in mind that complex play skills are normally developed around 4 years of age, therefore it is important to encourage peer-mediated play strategies during the preschool years.


Check out all of our products to encourage pretend play in all children.

Read more about play:

Sensory Processing and Pretend Play

6 Ways to Adapt Pretend Play: Pediatric therapists can help to provide consultation services to adapt toys and activities in the home, preschools and early elementary schools.

Why Children NEED Pretend Play

Pretend Play and Executive Function

Playground Interventions to Help Young Children with Autism

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Pediatric Physical Therapy published research on hand-arm bimanual intensive therapy and motor planning. Functional near-infrared spectroscopy neuroimaging was used on 9 children with hemiplegic cerebral palsy pre and post 50 hours of HABIT training (hand-arm bimanual intensive therapy). Further evaluation of bimanual coordination and motor performance was completed using the Assisting Hand Assessment, the average number of shapes matched, the shape matching errors, the reaction time, the 9-hole peg test, and the box and blocks test.

Results of the Study

Statistical analysis regarding hand-arm bimanual therapy and motor planning indicated the following:

- pre-frontal cortex activation decreased following HABIT and was similar to what was seen in the neurotypical children. This decrease may be associated with the reduction in attention to the motor task i.e. automaticity of the motor tasks, improvement in the functional cost of sharing cognitive and motor resources and/or increased efficiency of the neuronal circuits for directing the planning and control of goal-directed actions.
- following HABIT significant improvements were seen in bimanual coordination, manual dexterity, reaction time, a greater number of attempts to match shapes, and fewer shape-matching errors supporting that the children learned to better plan and execute their motor actions.

The researchers concluded that 50 hours of HABIT is a promising intervention to improve the action planning of young children with hemiplegic cerebral palsy.


Read more on [50 Bimanual Activities of Daily Living and get a FREE Printable!](#)

Research Review on CIMT and Bimanual Therapy for Children with Cerebral Palsy

CIMT, Bimanual Therapy, and OT Home Programs

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[Therapeutic PLAY Activities for Children](#) digital download includes 100 play activity pages and 12 tip sheets. The play activities encourage the development of fine motor skills, bimanual skills, rolling, crawling, tall kneeling, standing balance and cruising with a strong focus on children with cerebral palsy. [FIND OUT MORE INFORMATION.](#)
SUMMER VISUAL SCANNING ACTIVITY – HOW FAST CAN YOU FIND IT?

This Summer visual scanning activity is super fun to see how fast you can find all the different summer objects. This freebie challenges visual scanning, visual discrimination, and visual motor skills.

**How to Complete the Summer Visual Scanning Activity**

Start the time.

Scan from left to right and top to bottom to mark off all of the sailboats.

When all sailboats have been found, stop the timer.

Record your time next to the sailboat picture.

Repeat for the bicycle and record your time.

Repeat for the watermelon slice and record your time.

See which object you found the fastest or go head to head with a friend to see who can complete the task the quickest.

**Download your FREE Summer Visual Scanning Activity here.**

This activity is from Ready, Set, Scan SUMMER.

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The Ready Set Scan SUMMER Theme digital download includes 12 visual scanning and discrimination activities all with a SUMMER theme. How fast can you scan, find and mark each item? There are 12 challenges in all with different themes including summer objects, ice cream, popsicles, flip-flops, and sunshine. Just print and start the search. Follow the directions: start a timer, scan for one object at a time, mark each object and stop the timer. Record your time in the box provided. Dot markers work great for marking the item. Use a different color dot marker for each item. Add fine motor skills by using pom poms or bingo chips to mark each object. Add some summer fun to your visual perceptual practice!

**Ready, Set, Scan SUMMER** encourages:

- visual scanning
- visual tracking
- visual discrimination skills
- visual motor skills

**FIND OUT MORE ABOUT READY SET SCAN SUMMER HERE.**

Looking for more summer freebies:

- Summer Match-Up
- Find and Color Marine Life
- Find and Draw Summer
- Summer Sunglasses Craftivity

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It is hard to believe that summer is finally here! Encourage children to enjoy all that summer has to offer and create a DIY summer bucket list. A bucket list should include all the activities, games, crafts, etc. that the child would like to complete this summer. There are no right or wrong answers. Not only will this activity be fun, it will sneak in handwriting practice. Children will be motivated to create a list of all the exciting things they would like to accomplish with this DIY summer bucket list handwriting freebie (you can download the freebie at the bottom of the post). As you create the list, talk with children about the importance of going outdoors, physical activity and downtime during the summer.

The DIY summer bucket list handwriting activity includes 7 pages to print and use. You will need to choose which pages you want to use for the bucket list based on the child’s ability.

Page 1 – list 10 summer bucket list ideas on regular line paper
Page 2 – list 10 summer bucket list ideas on dotted line paper
Page 3 – list 10 summer bucket list ideas on double line paper (similar to Handwriting without Tears style)
Page 4 – list 20 summer bucket list ideas on regular line paper
Page 5 – list 20 summer bucket list ideas on dotted line paper
Page 6 – list 20 summer bucket list ideas on double line paper (similar to Handwriting without Tears style)
Page 7 – Summer Bucket Word List: offer this to the child if they need motivation or spelling help

If you are looking for more AMAZING ideas to encourage gross motor, fine motor, handwriting and visual perceptual skills over the summer, check out the SUMMER SENSORY MOTOR BUNDLE.
Did you know research has shown that 5-20 minute movement breaks can positively many aspects of learning? This sidewalk chalk obstacle course includes aerobic activity, balance skills, proprioceptive input, outdoor time and academic concepts! It is super easy to set up.

**How to Create the Sidewalk Chalk Obstacle Course**

Simply draw an obstacle course on the pavement with a few learning stations. You can view a video of this activity in action below.

**Section 1 – Jumping Patterns**

For this obstacle course, we started with footprints going in various directions so the child has to jump forwards, sideways and backwards. The first learning station has several letters that the child reads out loud. This station encourages gross motor skill development, coordination skills, proprioceptive input, vestibular input and motor planning.

**Section 2 – Twisty Path**

Walk along the twisty path to get the next group of letters to practice balance and coordination skills. The child reads a different group of letters out loud.

**Section 3 – Circle Jumps**

Jump from circle to circle to get to the next group of letters. Make sure you double outline the circles or color them in if doing letter recognition so the child doesn’t confuse the circle shapes with the letter ‘O’. This section encourages gross motors, visual-spatial, and coordination skills.

**Section 4 – Hopscotch**
Trace your feet together and then one foot to create a hopscotch pattern before the next group of letters. The section encourages balance skills, motor planning, and coordination skills.

Section 5 – Running in Place

Draw a stick figure running in place in the last large box before the letters. The child has to run in place while reading the letters. This is difficult for some children to coordination both actions at the same time. This station encourages aerobic activity and motor planning.

Remember, research indicates that movement and learning can help to improve the following:

- cognitive skills including executive function, attention span, memory skills and verbal comprehension
- academic achievement on test scores
- attitude changes in motivation and self-concept
- on task behaviors
- organizational skills
- motor planning
- impulse control
- memory


References:


Do you enjoy coloring? I do find it relaxing and calming unless they are too intricate. For some, if you were to color just one page it would take hours and hours. This FREE Love this Life inspirational coloring page freebie is simple with a beautiful message and it won’t take hours to complete (download at the bottom of the post). We all (adults and children) need to appreciate each and every day we have on this Earth. This positive affirmation coloring page reminds us to love our lives. And, if you are going through a tough time, hopefully, it will help you to: realize the good things about your life, be grateful and encourage you to change what you can.

This coloring page is from the **Inspirational Coloring Book**. The digital download includes 25 simple coloring pages with inspirational messages. All the pages are in black and white.

**DOWNLOAD A FREE SAMPLE COLORING PAGE – LOVE THIS LIFE**

*Get your Inspirational Coloring Book here.*