Your Therapy Source News

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New and Sale Products

December Visual Perceptual Puzzles 20 puzzles to challenge visual motor, visual closure, visual spatial and visual discrimination skills.



December Visual Perceptual Puzzles

By: Your Therapy Source Inc

Summary: Download of 20 visual motor, visual spatial, visual closure and visual perceptual challenges with a December theme.

Price: \$2.99

Sale Price: \$1.99 until 12/31/15

FIND OUT MORE AT http://yourtherapysource.com/vpdecember.html



Yoga Cards and Game Ideas

By: Your Therapy Source

Summary: Download of 30 yoga cards with directions, Sun Salutation sequence and over 20 game ideas.

List Price: \$6.99

FIND OUT MORE AT http://yourtherapysource.com/findcolor.html

5 Tips to Support Risk Taking in Children



Do you allow children to explore enough? Risk taking is so important in childhood. This generation of children is so shielded from many risks that perhaps you and I were allowed to overcome as we grew up. Taking a risk and achieving a goal provides a child with a strong sense of accomplishment. Remember back to when you were young when you climbed a tall tree, scaled a fence or rode your bicycle down a steep hill. It feels exhilarating that you did it by yourself. So next time a child is trying a new skill that might be a bit risky try some of the tips before you say "stop":

 Observe the situation closely. See if they can do the task safely without you interfering.
If you need to interfere to ensure safety can you offer verbal suggestions instead of physical prompts?
It is the same theory when children are learning

any new skill assist as little as possible. Even in situations where it may be easier for you to help in

terms of speeding up the task or peace of mind.

4. Will the child succeed better if someone else is the teacher? If you are particularly nervous watching a child perform a certain skill, perhaps ask someone else to work on the goal ie parent, aunt, uncle, etc.

5. Stop and make sure that you are not saying "no" due to your own fears. When children walk along in the school or the community, are you especially fearful that they may not make it safely to their destination? Perhaps start off small and follow quite a bit distance behind until you are comfortable that the child arrived to the destination. In a school setting, send the child back to class alone but maybe call the classroom to let the teacher know the child is on his/her way. This gives the child a sense of independence. What do you do to support risky exploration in children?

It's a plane..... It's a bird..... It's a Superhero Action Verb! This download includes sensory motor activities about action verbs such as roll, crawl, kneel, walk, run, hop, throw, kick, etc. Practice fine motor, gross motor, handwriting and literacy skills with this collection.

FIND OUT MORE at http://yourtherapysource.com/superhero.html



Going Outdoors to Improve Attention Span



The Journal of Attention Disorders published research on the benefits of walking in a park to increase attention span. A small group of 17 children with ADHD, participated in a study comparing walks in a park, downtown and a neighborhood. The walks in the park resulted in a significant difference in concentration as scored on the Digit Span Backwards (DSB).

The article also discusses Attention Restoration Theory (ART). The basics of this theory is that interacting with nature results in a type of restoration for the body and the brain. Try to remember a recent event when you spent time outdoors in a natural environment. You may walk slowly and attend to all of your visual surroundings – a bird chirping, a sunset, the green grass of Spring. When you return indoors, you feel relaxed and calm. Now to try to remember that last time you were outdoors in a busier environment, perhaps a city. Your attention may be focused on planning when to cross a street, avoiding cars and other city obstacles. These two environments rely on your brain to use two different types of attention – involuntary and voluntary. Concentrating on topics that interest you or something that grabs your attention involves involuntary attention. Concentrating on blocking out distractions to focus on the topic at hand involves voluntary attention (which can fatigue easily). When the brain experiences involuntary attention it allows voluntary attention to rest and recover.

The authors of this study question whether children with ADHD experience deficits in voluntary attention resulting in the fluctuating attention span that you see in children with ADHD. Therefore, the Attention Restoration Theory when applied to children with and without ADHD

Going Outdoors to Improve Attention Span (continued)

can perhaps be very beneficial. Walks in nature are simple to carry out on a daily basis. The "restorative" action of the walks which call upon involuntary attention can possibly help to improve voluntary attention.

With the amount of television and computer time that children are exposed to daily, more time spent outdoors is essential. Here are several ideas to encourage increased nature time for all children:

1. Take hikes and short walks in the woods. If you need a wheelchair accessible path, search state parks for handicapped accessible trails or try bike paths that are paved.

2. Go letterboxing or geocaching – Letterboxing is a great family activity for people of all ages. You can go to www.letterboxing.org for a list of clues throughout the USA. You print off the clues, walk to find them and stamp a marking in your log book. Use your smartphone or GPS to go geocaching and find hidden treasures.

- 3. Gardening plant a garden with children. Plant seeds in pots so that all children can assist.
- 4. Go on scavenger hunts for outdoor materials check out Scavenger Hunts e-book for ideas 5. Allow children to play outdoors in dirt, mud and puddles.
- 6. Go on a bug hunt see how many different bugs you can identify
- 7. Start a nature collection such as rocks, acorns, leaves or pine cones.
- 8. Go fishing, frog hunting, horseback riding or birdwatching.
- 9. Build a structure out of natural materials i.e. fort, collage made out of sticks or leafs.
- 10. Encourage teachers and therapists to plan lessons outdoors.

Fresh air makes everyone feel healthier, relaxed and perhaps improves attention. It is a simple way to improve concentration with no side effects (except skinned knees).

References:

Faber Taylor, Andrea, Kuo, Frances E. Children With Attention Deficits Concentrate Better After Walk in the Park J Atten Disord 2009 12: 402-409

Cimprich, B Attention Restoration Theory: Empirical Work and Practical Applications Retrieved from the web on 4/17/09 at

http://www.umb.no/statisk/greencare/meetings/presentations_vienna_2007/cimprich_cost_pres _71007.pdf



Why not try yoga for its restorative benefits? Even better, do yoga outdoors to help with focus and calming the mind.

Check out Yoga Cards and Game Ideas at *http://yourtherapysource.com/yogacards.html*

Cognitive Orientation to Daily Performance

Cognitive orientation to daily occupational performance or CO-OP is defined by Polatajko and Mandich as a "a client-centred, performance based, problem solving approach that enables skill acquisition through a process of strategy use and guided discovery". CO-OP is an evidence based approach that has been successful for children with developmental coordination disorder (DCD) and autism spectrum disorder (Rodger & Brandenburg, 2008).

According to Missiuna et al. the main objectives of CO-OP are:

- 1. skill acquisition in child-chosen tasks
- 2. development of cognitive strategies
- 3. generalization and transfer of learned skills and strategies.



South States

The steps to the CO-OP approach include client chosen goals, dynamic performance analysis, cognitive strategy use, guided discovery, enabling principles, parent/significant other involvement and intervention format.

Generally, the CO-OP approach is GOAL – PLAN – DO – CHECK.

Step 1: The child along with the parents determine a goal or task that needs to be accomplished. The therapist performs evaluations and assessments to determine if the goal is feasible.

Step 2: Create a plan together to reach the goal. To begin, the therapist performs a task analysis of the child performing the skill. The child can explore different strategies such as body position, attention to the current task, modifications, self talk, self monitoring, etc.

Step 3: Carry out the plan with the child using the planned strategies to accomplish the task.

Step 4: Check the plan. How well did it all work? What was successful? What can I change? What needs improvement? This can be done through self-interrogation, self-monitoring, self-observation and self-evaluation.

There are many resources to learn more about this cognitive based approach to achieving new motor skills. This pdf is a great place to start to explore this approach further – Polatajko & Mandich (2010). Cognitive Orientation to daily Occupational Performance (CO-OP). Retreived from the web on 11/18/15 from http://www.dyspraksi.no/uploads/7/0/4/9/7049202/co-op-info-jolien.pdf.

Here is a helpful list of peer reviewed, evidence based articles on CO-OP http://ot.utoronto.ca/coop/research/publications/articles.html

References:

Missiuna, C., Mandich, A., Polatajko, H. & Malloy-Miller, T. (2001). Cognitive orientation to daily occupational performance (CO-OP): Part I — Theoretical foundations. Physical and Occupational Therapy in Pediatrics, 20, 69-81.

Polatajko, H. & Mandich, A. (2004). Enabling occupation in children: The cognitive orientation to daily occupational performance (CO-OP) approach. Ottawa, ON: CAOT Publications.

Polatajko & Mandich (2010). Cognitive Orientation to daily Occupational Performance (CO-OP). Retreived from the web on 11/18/15 from http://www.dyspraksi.no/uploads/7/0/4/9/7049202/co-op-infojolien.pdf.

Rodger, S. & Brandenburg, J. (2008). Cognitive Orientation to (daily) Occupational Performance (CO-OP) with children with Asperger's syndrome who have motor-based occupational performance goals. Australian Occupational Therapy Journal. doi: 10.1111/j.1440-1630.2008.00739.x

Implicit and Explicit Motor Learning in Boys with Autism



Research in Developmental Disabilities published an article comparing implicit versus explicit motor learning in 30 boys with autism spectrum disorder (ASD) and their age and IQ matched peers. Each children participated in a serial reaction time task (SRTT). The children were separated into different groups based on diagnosis and implicit or explicit learning for the SRTT.

The results indicated the following:

1. implicit motor learning occurred in both children with ASD and typical children with no significant differences between groups

2. explicit motor learning was only observed in typical children not children with ASD with a significant difference between groups for explicit learning.

The researchers concluded that implicit motor learning is not affected in children with ASD. They discuss applying to the cognitive orientation to daily occupational performance (CO-OP) approach of motor learning with children with ASD. Check out the next blog post for more information on the CO-OP approach of motor learning.

Reference:

Sara Izadi-Najafabadi et al. Implicit and explicit motor learning: Application to children with Autism Spectrum Disorder (ASD). Research in Developmental Disabilities. Volume 47, December 2015, Pages 284–296

Adventure Skill – Self-Regulation Flash Cards By: Move with Me Summary: This 16 Flash Card Set in printable PDF format – includes health lessons and selfregulation techniques that combine creative movement, yoga and Brain Gym® FIND OUT MORE at http://www.yourtherapysource.com/movewithmeselfregulation.html

SNARC Effect and Motor Responses

Have you ever heard of the SNARC effect? I had not, so when I read about it in a research article I decided to find out more information. SNARC stands for spatial-numerical association of response codes. The SNARC effect is when someone is presented with smaller numbers people respond faster with the left hand and when presented with larger numbers people respond faster with the right. This results in an mental representation of a number line. Some research indicates that the SNARC effect is present in children as young as 5.8 years old. Preschool children are developing the SNARC effect.

In one study, 4 year olds participated in a spatial search task with a box that had seven compartments labeled with the numerals 1 to 7. For half of the children the numbers increased from left to right, and for the other half the numbers increased from right to left. The results showed that children were faster and more accurate in the left-to-right search condition. In a second experiment, the researchers asked preschool children (3–5 years of age) to count a given linear set of objects. The results indicated that already 73% of the preschoolers started counting at the leftmost object and proceeded to the rightmost object.

Another study involving 4-year-olds discovered that the children were faster when choosing the display containing less elements when it was presented on the left side of the screen and more elements when presented on the right side of the screen.

Additional research (Crollen, 2015) indicates that children with non verbal learning disabilities (NVLD) do not display the SNARC effect. NVLD seems to affect the accuracy and the nature of the mental number line by decreasing the saliency of its left-to-right orientation.

Another study (Lindemann, 2007), revealed a close link between numerical cognition and motor control. The researchers discovered that precision grip actions were initiated faster in response to relatively small numbers, whereas power grip actions were initiated faster in response to large numbers. Interestingly, numerical magnitudes did not affect the actions if they involved no grasping component and consisted only of a reaching movement (i.e., pointing response) toward the smaller or larger (respective upper or lower) part of the object. Therefore, reaction time effects remained present when controlling for the number of fingers used while grasping but disappeared when participants pointed to the object.

Do you take numerical magnitude into consideration when working on visual spatial tasks with children? If you do, does it improve the child's accuracy? I would be very interested in seeing additional research on this topic especially with the children that receive school based therapy services, exhibit visual perceptual deficits or any children with motor planning deficits.

References:

Crollen, V. et.al Spatial and numerical processing in children with non-verbal learning disabilities. Research in Developmental Disabilities. Volume 47, December 2015, Pages 61–72

Hoffmann, D et al. Developing number–space associations: SNARC effects using a color discrimination task in 5-year-olds. Journal of Experimental Child Psychology Volume 116, Issue 4, December 2013, Pages 775–791

Lindemann, O et al. Getting a grip on numbers: numerical magnitude priming in object grasping. J Exp Psychol Hum Percept Perform 2007 Dec;33(6):1400-9

Self Regulation, Cognitive Abilities and Motor Disabilities



Research in Developmental Disabilities published research on secondary and post-secondary student with congenital motor disabilities. By examining a task of throwing a ball at a target, data was collected on self-regulatory aspects (i.e., goal-setting, self-efficacy and self-evaluation). Participants were divided into four subgroups: 1.) normal cognitive development and mild physical disabilities 2.)normal cognitive development and severe physical disabilities 3.) mild-to-moderate intellectual disability and mild physical disabilities, and 4.) mild-to-moderate intellectual disability and severe physical disabilities.

Results showed the following:

1. students presenting mild motor disabilities showed a positive self-concept and self-regulation profile, with or without cognitive challenges.

2. students with considerable motor disabilities without cognitive challenges, had a negative, though realistic self-concept and self-regulation profile.

3. students with considerable motor disabilities and mild-to-moderate cognitive disabilities showed a positive, but unrealistic, self-regulation profile.

Reference: Panagiotis Varsamis, Ioannis Agaliotis. Relationships between gross- and fine motor functions, cognitive abilities, and self-regulatory aspects of students with physical disabilities. Research in Developmental Disabilities. Volume 47, December 2015, Pages 430–440

Check out Positive Affirmation Posters and Cards by Your Therapy Source

Summary: Download of electronic book of 25 positive affirmation posters and 25 small cards of the posters. Find out more at http://yourtherapysource.com/positiveaffirmation.html

Using Scaffolding or Chaining to Reach a Goal

At times, all children need some help to achieve big goals. Whether it be a lofty IEP goal that you inherited, a large project the student needs to complete or a complex motor skill often times it is easier to break it up into smaller, more manageable chunks. Teachers call it scaffolding and therapists sometimes call it chaining (or backwards chaining if you work backwards). Whatever you want to name it, sometimes a project needs to be accomplished in smaller pieces. Here are several tips to make it easier:

1. Before you break it up into smaller chunks, demonstrate what you need accomplished as the final result. If it is a large project, make sure the student sees the end result of



what is expected. If it is a complex motor skill, demonstrate it so the student can visually see it. If you can not demonstrate the skill, find a peer who can. Even better, video tape the skill and send it home with the child so they can review it whenever necessary.

2. Ask the child for input to create a timeline to achieve the goal. Let the student help map out how to break up the skill. Ask questions to help prompt the child if necessary but do not just provide the solution to the problem. If the student is able, write down a timeline of when each part will be completed. For example, if the student is learning how to climb stairs in a crowded stairwell, then the timeline could include activities such as climb the stairs independently with visual distractions in the stairwell, climb the stairs independently with one other student in the stairwell and finally climbing the stairs with many students in the stairwell. Set dates for each skill to be accomplished. If the student is tackling a big academic project, encourage him/her to set specific dates with specific directions for each part of the project.

3. Stop, reflect and review. When you are moving through each "piece" of the overall goal stop, reflect and review. Is the student able to repeat what was previously learned and show 100% achievement of that "piece"? Ask the student if they need to change the timeline or any strategies that have been employed. Inquire if he/she could do it better the next time?

4. Teach the child to offer suggestions from peers and to ask for suggestions from peers. Once the child has a plan in place encourage them to discuss the plan and look for feedback.

5. Create step by step visual pictures if needed. If the written timeline is not sufficient, perhaps take pictures of the steps needed to complete the overall goal. The student can move through the visual schedule to help to complete the project.

What strategies do you use with your students to tackle big goals?

10 Tips When Teaching Self Help Skills

Here are 10 tips to help teach children to be independent with self help skills and everyday routines:

1. Make sure you have time to give the child your undivided attention when you are first teaching a new skill or routine. Likewise, make sure that the child is paying attention when learning the skill. Minimize distractions and create a quiet environment at first.

2. Break down the skill into simple steps. Give specific directions on how to complete each step. For example with washing hands break the skill into several steps: wet hands, put soap on hands, rub hands together and wash for 20-30 seconds, rinse hands, dry hands and turn off water.

3. To help the child understand the self help skill provide visual mages or photographs for each step. When each step is completed the child can move on to the next picture.



4. Demonstrate each step as you move through the sequence. Check if the child understands fully before you move to the next step.

5. Try to use the same wording on each step by step direction for consistency. As the child becomes more independant, reduce the verbal cues until they can be discontinued completely.

6. Encourage and praise the child for each step that is accomplished. If a child is unable to complete a step you can help with that one step. Always work to slowly fade away your assistance.

7. If able, offer a choice to help the child feel more independent. For the handwashing example, offer two different kinds of soap to choose. For dressing skills, let the child pick out his/her clothes.

8. Offer some positive reinforcement. For example, if you complete a certain number of steps then you will be able to choose a book to read, play with a toy for special toy for a few minutes, etc.

9. Be patient. Take your time completing the routine or skill. Provide extra time to complete the skill.

10. Celebrate! When a child is consistently independent with a new skill or routine celebrate the success. Give the child a reward. Check out these 30 free or low cost rewards.

Need visual picture images when teaching dressing skills? Check out this popular packet – **Dressing Skills: Step by Step Visual Directions to Teach Children How to Dress**.

Find out more here http://www.yourtherapysource.com/dressing.html

Emotion Packet Freebies



Here is a great freebie from the Emotions Packet. Practice fine motor, visual motor and self regulation skills with these freebies.

Download them here: http://yourtherapysource.com/emotionsfreebie

Simple Mandalas



Mandala means "circle" or "center." Coloring mandalas can help to encourage relaxation, relieve stress, facilitate creativity and balance the body. Here are three simple mandalas to color to help to calm the body. They are perfect to add to a quiet corner or calm down kit in the classroom.

> Download them here: http://yourtherapysource.com/freemandalas.html

Downward Dog Yoga Pose



This Downward Dog Yoga Pose is a free sample from <u>Yoga Cards</u>. The purpose of the downward dog pose is to:

- 1. improve balance.
- 2. stretch the back and the hamstring muscles (back of the thighs).
- 3. strengthen the shoulders, arms and the core muscles.
- 4. stimulate the vestibular system with the inverted position of the head.
- 5. relieve lower back compression.

Download the freebie to learn how to do the pose – http://yourtherapysource.com/yogacardsfreebie.html

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