#### **Cross Laterals**

One type of intentional activities and drills that help in concentration are cross-lateral exercises. Therapeutically, whenever you cross the mid-line of the body, such as touching opposite hand and knee or foot can be considered a cross-lateral activity. If you've ever tried patting your head with one hand, while rubbing circles on your belly with the other, you've demonstrated cross-lateral connectivity. The communication that is created to perform these asymmetrical movements simultaneously is left-right brain integration; both hemispheres of the brain working in partnership. Performing these type of brain concentration movements can help build the connection between the right and left hemispheres of the brain. This "global synchronization "allows for electrical impulses and information to pass more freely between the two, which is needed for physical coordination and cognitive activities.

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\*Equipment needed for Cross-Lateral drills: One tennis or racket ball per participant

## 1. Ear to Nose with PPT

Description: A cross-lateral concentration drill where each hand alternately touches the nose and ears.

Material needed: Cross-Lateral: Ear to Nose PPT

- 1. Sit tall in the chair with feet flat on the floor.
- 2. With the forefinger of the right hand, touch the left ear and hold.
- 3. With the forefinger of the left hand, touch the bridge of the nose and hold.
- 4. Release the left hand.
- 5. Release the right hand.
- 6. As a prompt, remind the participants that since the left hand last touched the nose, the left forefinger will now touch the right ear and hold.
- 7. With the forefinger of the right hand, touch the bridge of the nose and hold.
- 8. Release the right hand.
- 9. Release the left hand.
- 10. Perform 10 repetitions.
- 11. Progression: 1) Discontinue the PPT after 10 repetition. 2) Count out load with the two finger touches and the two releases i.e. 1,2,3,4. 3) Perform with eyes closed.

# 2. Figure 8's with Ball

Description: A cross-lateral drill moving a ball in a figure 8 configuration through the legs and behind the back.

Equipment: Tennis or racket ball per participant

- 1. In a chair, have the participants sit to the front half of the seat with their legs shoulder width apart.
- 2. Both feet pointed forward, in front of the knees.
- 3. Hold the ball with the right hand and resting on the right knee.
- 4. Move the ball under the left knee.
- 5. Grasp the ball with the left hand and count "one".
- 6. With the left hand, move the ball over the left knee.
- 7. Move the ball under the right knee.
- 8. Grasp the ball with the right hand and count "two".
- 9. Bring the ball to the center of the back.
- 10. At the same time, bring the left hand to the center of the back.
- 11. Grab the ball with the left hand and count "three".
- 12. Bring the left hand with the ball back to the front mid-line of the body.
- 13. Touch the ball with the right hand and count "four".
- 14. Complete 5 clockwise rotations.
- 15. Move the ball under the left knee.
- 16. Grasp the ball with the right hand and count "one".
- 17. Move the ball under the right knee.
- 18. Grasp the ball with the left hand and count "two".
- 19. Bring the ball to the center of the back.
- 20. At the same time, bring the right hand to the center of the back.
- 21. Grab the ball with the right hand and count "three".
- 22. Bring the right hand with the ball back to the front mid-line of the body.
- 23. Touch the ball with the left hand and count "four".
- 24. Complete 5 counterclockwise rotations.
- 25. Alternate clockwise and counterclockwise rotations 5 times.

## 3. Arm Direction Arrows 3 PPT

Description: An attention drill where the participant moves their arms in the direction of the arrows according to the color cue.

Material needed: Cross-Lateral: Arm Direction Arrows 3 PPT

- 1. Sit tall in the chair with feet flat on the floor.
- 2. Tell the participants that they will be moving their arms in four directions.
- 3. Utilize the mirror technique.

- 4. Demonstrate the right arm movement by extending the left arm out to the side with the right hand touching the left shoulder.
- 5. Demonstrate the left arm movement by extending the right arm out to the side with the left hand touching the right shoulder.
- 6. Demonstrate the upward arm movement by extending both arms toward the ceiling.
- 7. Demonstrate the downward arm movement by pointing both arms to the floor.
- 8. When the arrow is blue, move arms in the direction of the arrow.
- 9. When the arrow is red, move arms in the opposite direction of the arrow.
- 10. Progression: Have the participants keep a running count of the number of opposite blue arrows.

## 4. Toe-Knee-Ear Touches

Description: A cross-lateral concentration drill where one hand touches the opposite foot and ear, and the other hand touches the opposite knee.

- 1. In a chair, have the participants sit to the front half of the seat with their legs shoulder width apart.
- 2. Both feet pointed forward, in front of the knees.
- 3. With the right hand touch the left foot and return to an upright position.
- 4. Hint: Tell the participants to use their legs to sit up. This is done by pushing down with the balls of the feet and engaging the thighs to "lightly" sit up.
- 5. With the left hand touch the right knee.
- 6. Return the left hand to the side.
- 7. With the right hand touch the left ear.
- 8. With the left hand touch the right foot and return to an upright position.
- 9. With the right hand touch the left knee.
- 10. Return the right hand to the side.
- 11. With the left hand touch the right ear.
- 12. This completes one rotation.
- 13. Complete five rotations.
- 14. Progression: Perform with the eyes closed.

## 5. Clap Tap Deuce PPT

Description: A cross-lateral reaction drill where the participant claps twice, touches their knee then claps twice again.

Material Needed: Cross-Lateral: Slap Tap Deuce PPT

- 1. Sit tall in the chair with feet flat on the floor.
- 2. The words Right and Left will appear on a series of PPT slides.
- 3. The order of the words will determine which hand will be used to touch which knee.
- 4. For example: if the words appear as RIGHT-LEFT

- 5. The participants will clap twice (deuce!).
- 6. The participants will use their RIGHT hand to tap their LEFT knee.
- 7. The participants will clap twice.
- 8. Progression: 1) Perform standing 2) Have the participants close their eyes during the drill while the facilitator calls out the RIGHT/LEFT sequence.

#### 6. Cross Knee Claps

Description: A cross-lateral concentration drill where the participant touches both knees and then claps both hands.

- 1. Sit tall in the chair with feet flat on the floor.
- 2. Move the Right hand and tap the Left knee.
- 3. Remove the Right hand and return to the right side
- 4. Move the Left hand and tap the Right knee.
- 5. Bring hands together at mid-line and clap.
- 6. Repeat 5 times
- 7. With the Left hand tap the Right knee.
- 8. Remove the Left hand and return to the left side.
- 9. Move the Right hand and tap the Left knee.
- 10. Bring hands together at mid-line and clap.
- 11. Repeat 5 times
- 12. Alternate between the Left and Right knee taps 5 times
- 13. An easy cue to help the participants is to tell them to say the steps to themselves. i.e. Right-Left-Clap, Left-Right-Clap, Right-Left-Clap, Left-Right-Clap
- 14. Progression: Perform with eyes closed

#### 7. Arm Direction Arrows 4 PPT

Description: A sequence processing drill where the participant moves their arms in the direction of the arrows while verbalizing the arrow direction, color and background.

Material needed: Cross-Laterals: Arm Direction Arrows 4 PPT

- 1. Sit tall in the chair with feet flat on the floor.
- 2. Tell the participants that they will be moving their arms in four directions.
- 3. Utilize the mirror technique.
- 4. Demonstrate the right arm movement by extending the left arm out to the side with the right hand touching the left shoulder.

- 5. Demonstrate the left arm movement by extending the right arm out to the side with the left hand touching the right shoulder.
- 6. Demonstrate the upward arm movement by extending both arms toward the ceiling.
- 7. Demonstrate the downward arm movement by pointing both arms to the floor.
- 8. A series of PPT slides with colored arrows and backgrounds will be shown.
- 9. As the slide appears, have the participants say the color of the background.
- 10. Have the participants say the direction of the arrow i.e. Up, Down, Left and Right.
- 11. As the participants say the direction of the arrow, have them move their arms in the direction of the arrow.
- 12. Have the participants say the color of the background.
- 13. For example: A blue background with a green left arrow will be verbalized by, Blue-Left-Green with left arm movements.
- 14. Progression: 1) Change order of color sequence 2) Verbalize and perform arm movements opposite of the arrow direction.

## 8. Lazy 8's with PPT

Description: An attention drill where there is bi-lateral arm movements in the form of an infinity symbol or a "lazy 8".

Material needed: Cross-Lateral: Lazy 8's PPT

- 1. Sit tall in the chair with feet flat on the floor.
- 2. Show the first "Figure 8" PPT slide.
- 3. Demonstrate the "Figure 8" arm motion to the participants.
- 4. Explain that the hands need to move past the mid-line of the body and past the shoulder.
- 5. Position both arms forward with arms and forefingers outstretched.
- 6. Using the Left PPT slide as a prompt, move both hands to the left.
- 7. When the right hand has reached the left shoulder, move both hands in a downward motion.
- 8. Move both hands to the right "crossing" the body's mid-line.
- 9. When the left hand has reached the right shoulder, move both hands in an upward motion.
- 10. Perform five "left" rotations.
- 11. Using the Right PPT slide as a prompt, move both hands to the right.
- 12. When the left hand has reached the right shoulder, move both hands in an upward motion.
- 13. Move both hands to the left "crossing" the body's mid-line.
- 14. When the right hand has reached the left shoulder, move both hands in a downward motion.

15. Perform five "right" rotations.

- 16. Perform five "left" rotations with the left hand only.
- 17. Perform five "right" rotation with the right hand only.
- 18. Alternate performing one "left" rotation with one "right" rotation five times.
- 19. Progression: Perform with eyes closed.