

Box and Block Test:

Adapted from Mathiowetz, V., G. Volland, et al. Adult norms for the Box and Block Test of manual dexterity, Am J Occup Ther, 39(6): 386-391, 1985.

Procedure:

The patient is allowed a 15-second trial period prior to testing.

Immediately before testing begins, the patient should place his/her hands on the sides of the box.

When testing begins, the patient should grasp one block at a time with the dominant hand, transport the block over the partition, and release it into the opposite compartment. The patient should continue doing this for one minute.

The procedure should then be repeated with the non-dominant hand.

Set-up:

A test box with 150 blocks and a partition in the middle is placed lengthwise along the edge of a standard-height table.

150 blocks should be in the compartment of the test box on the side of the patient's dominant hand.

The examiner should face the patient so they can view the blocks being transported

Patient Instructions (derived from Mathiowetz et al, 1985):

"I want to see how quickly you can pick up one block at a time with your right (or left) hand [point to the hand]. Carry it to the other side of the box and drop it. Make sure your fingertips cross the partition. Watch me while I show you how."

Transport three cubes over the partition in the same direction you want the patient to move them. After a demonstration say the following:

"If you pick up two blocks at a time, they will count as one. If you drop one on the floor or table after you have carried it across, it will still be counted, so do not waste time picking it up. If you toss the blocks without your fingertips crossing the partition, they will not be counted. Before you start, you will have a chance to practice for 15 seconds. Do you have any questions?"

"Place your hands on the sides of the box. When it is time to start, I will say ready and then go."

Trial period: Start the stop watch at the word go. When 15 seconds has passed, say "stop." If mistakes are made during the practice period, correct them before the actual testing begins.

On completion of the practice period, transport the cubes to the original compartment.

"This will be the actual test. The instructions are the same. Work as quickly as you

can. Ready.” [Wait 3 seconds] “Go.” “Stop.” [After 1 minute, count the blocks and record as described above]

“Now you are to do the same thing with your left (or right) hand. First you can practice. Put your hands on the sides of the box as before. Pick up one block at a time with your hand, and drop it on the other side of the box.”

“Ready.” [Wait 3 seconds] “Go.” “Stop.” [After 15 seconds]

Return the transported blocks to the compartment as described above.

“This will be the actual test. The instructions are the same. Work as quickly as you can.”

“Ready.” [Wait 3 seconds] “Go.” “Stop.” [After 1 minute, count the blocks and record as described above]

Scoring:

The score is the number of blocks carried from one compartment to the other in one minute. Score each hand separately.

Note:

- 1) If a patient transports two or more blocks at the same time, this should be noted and the number subtracted from the total
- 2) No penalty should be made if the subjects transported any blocks across the partition and the blocks bounced from the box to the floor or table

Box and Block Testing Form

Patient name: _____

Date: _____

Dominant Hand (circle one): Right

Left

of blocks transported in 1 minute:

Dominant Hand: _____

Non-dominant Hand: _____