MUH kid motor learning treadmill task script

Parts:

* Putting on markers

Have you ever been on a treadmill before? The belt will move backwards underneath you, you can walk just like normal. Now I’m going to put these reflective markers all over you. They’re like the ones used to make action movies, the cameras around the room will track them and tell us where you are and how you are walking.

\*put on markers\*

* Vicon calibration

Please step up onto the treadmill. We’re going to have you do a short 10 second walk so we can get the computer to recognize you. The screen in front of you will count down from 5, then the treadmill will start. Are you ready?

\*calibrate vicon\*

* Preferred step lengths

Next, we’re going to do a 3 minute walk so we can see how you normally walk. We’re going to harness you in so that there’s no chance of you falling. \*attach harness\* Please keep your hands on the yellow tape on the bars and do your best to keep your feet on either side of the center line on the treadmill. We’ll tell you when the treadmill will start and stop. Are you ready?

\*start preferred step length program\*

* Tape task

\*detach harness\* For this part, we’re going to have you take two steps, first a right step and then a left step, going from the start line here to each of these tape targets. \*demonstrating\* Start with our toes on this line, and then try to land your toes within the targets like this. We’re going to try 10 times for each target. Are you ready?

\*start tape task\*

* Visible target 1

Now we’re going to get you harnessed back in for the games you’re going to play. \*attach harness\* For this first game,

There’s going to be a ball on the screen that moves up and down while you’re walking. It will start at the bottom. Whenever you take a step with your right foot, the ball will move up the screen the distance of your step. So, if you take a really big step with your right foot, the ball will move far up the screen, and it you take a small step with your right foot the ball will only move a little bit up the screen. Then you keep walking, and the same thing happens when you take a step with your left foot- a big left step will move the ball a lot further up the screen and a small left step will only move the ball a little up the screen. At the end of every right and left steps, your goal is to land the ball inside the green box on the screen. If you do, you’ll see a firework go off telling you got it. The ball will reset after every left step whether you get a firework or not. The green box might move around and change size, but your goal is to make as many fireworks as possible by landing the ball in the green box.

\*start visible target 1\*

* Invisible target

Now, we’re going to have you play the same game except the targets will be hidden so you can’t see them. The targets will still move and change sizes, your job is to try to hit the invisible targets as much as possible and make as many fireworks as you can. Otherwise, the rules are the same as for the first task where you could see the targets; keep your feet on either side of the center line on the treadmill and keep your hands on the yellow tape on the bars. Are you ready?

\*start invisible target task\*

* Visible target 2

Now, we’re going to go back to the first game. You’ll be able to see the targets again. Keep your feet on either side of the center line on the treadmill and keep your hands on the yellow tape on the bars just like before. Are you ready?

\*start visible target 2 task\*

* End