

Supplemental Material S1. Administration procedures and directions provided to the peer partner for all 12 tasks.

Task 1: 2 wind-up toys, 1 broken (to elicit behavior regulation [BR])

Step 1: Examiner (E) pushes speech-generating device (SGD) button and says, “Let’s play wind-up toys,” and moves iPad between the children. E brings out two wind-up toys, one broken and one that works. E winds up working one and puts it on the table then says to Peer, “Now I want you to be my helper and wind it up to show [focus child (FC)] how it works. I want you wait and see if FC will ask you for help.” After peer winds up toy, E moves toy off to the side and has Peer give FC broken toy. E waits 7–10 sec and remains unengaged.

Step 2: 2nd Opportunity—If FC does not initiate to Peer or show BR, E prompts Peer to wind up the working toy one more time. E then moves it to the side and tells P to offer help, “Peer say _____, I can help.” E waits another 7–10 sec.

Step 3: If Peer offers to help before intentional FC communication observed E verbally prompts Peer to wait and see if FC will ask for help. In response to any FC communication to E, E points to Peer and says, “Look” and turns away. If FC requests help from Peer, E tells Peer to respond to FCs request; then transition to next activity.

Task 2: Stretchy toy in block container (to elicit joint attention [JA])

Step 1: E pushes SGD button and says, “Let’s play with blocks.” E brings out blocks in a container and asks Peer to offer some blocks to FC and to take a few to build with. FC and Peer build with blocks taking out more if they want to. Then E picks up the jar and secretly places a stretchy animal on the edge of the container and says to Peer, “I want you to hold the jar, I put a stretchy lizard inside but don’t say anything about it. Let’s see if FC notices it. Tell FC to pick a block.” E waits 7–10 sec.

Step 2: 2nd Opportunity: If FC does not comment on the stretchy toy or engage in JA with Peer, E takes away the lizard and says, “Give FC another block” and the children build again. E takes jar and places lizard back on the edge and asks Peer, “Hold the jar for FC and wait one more time to see if he/she notices the lizard. Tell FC to pick a block.” E waits 7–10 sec.

Step 3: In response to any FC communication to E, E points to Peer and the jar and says, “Look.” If FC does engage in JA to Peer, E makes sure that Peer responds to FCs comment about the lizard then transitions to next activity.

Task 3: Food items/sensory toy placed in container or jar with tight lid (to elicit BR)

Step 1: E pushes SGD button and says, “Let’s have a snack.” E opens the container and asks Peer to give one to FC and to take one. E tightens lid on container and offers container to Peer then says, “Give the container to FC and tell him/her, here is some snack, then wait and see if he/she asks you for help to open the snack.” E waits 7–10 sec.

Steps 2 and 3: As above for Task 1 to elicit BR

Task 4: Musical instruments (rain stick, xylophone, flute) in a bag (to elicit JA)

Step 1: E pushes SGD button and says, “Let’s play music.” E pulls out and comments on an instrument, then offers the bag to Peer. E says to peer, “I want you to be my helper and hold the bag, let’s see if FC

chooses an instrument to show you or tell you about." E waits 7–10 sec.

Steps 2 and 3: As above for Task 2 to elicit JA

Task 5: Hammer toy, 2 battery-operated toys, 1 that works and one that doesn't (to elicit BR)

Step 1: E pushes SGD button and says, "Let's play with a hammer." E offers working hammer to Peer and says, "Now I want you to show FC how your hammer works. Then, I want you wait and see if he/she will ask you for help with his/hers." After Peer bangs hammer, E moves working hammer to the side and tells peer to give FC nonworking hammer. E waits 7–10 sec.

Steps 2 and 3: As above for tasks to elicit BR

Task 6: Food in marker box (to elicit JA)

Step 1: E pushes SGD button and says, "Let's play with markers." E brings out closed box of markers and 2 pieces of paper. E asks Peer to give FC a piece of paper and offer some markers. FC and Peer color with markers taking out more if they want to. E secretly places a carrot in the box and says to Peer, "I want you to be my helper and hold the box, I put in a pretend carrot but don't say anything about it. Let's see if FC notices it. Hold up the box and tell FC to pick a marker." E waits 7–10 sec.

Steps 2 and 3: As above for tasks to elicit JA

Task 7: Train track and toy trains (to elicit BR)

Step 1: E pushes SGD button and says, "Let's play with train tracks." E gives the bag with pieces of track and trains to the peer and says, "You will get a chance to build too, but right now I want you to be my helper. Let's see if FC will ask you for tracks or trains. Hold the bag where he/she can see it but not close enough that he/she can take it." E waits 7–10 sec.

Steps 2 and 3: As above for tasks to elicit BR

Task 8: Books, 1 normal and 1 with altered pages (cut up, pages scribbled on) (to elicit JA)

Step 1: E pushes SGD button and says, "Let's look at books." E gives FC and Peer the book that is not marked up and says to Peer, "I want you to look at this book with FC. You can point and tell him/her things you see in the book." After they look at the book, E gives marked up book to FC and says to Peer "Ready to be my helper? I made some funny marks on this book, let's see if FC notices and shows you or tells you about it. Don't tell FC what is wrong with the pages." E waits 7–10 sec.

Steps 2 and 3: As above for tasks to elicit JA

Task 9: Bubbles, 2 bottles, one sealed, one not sealed (to elicit BR)

Step 1: E brings out two bubble containers and pushes SGD and says, "Let's play with bubbles." E blows some bubbles then says to Peer, "Now I want you to be my helper and show FC how to blow bubbles. Then, wait and see if FC will ask you for help with his/hers. His/her lid is stuck." Peer blows bubbles, then E instructs Peer to give FC the bubbles with sealed lid and puts Peer's bubbles to the side. E waits 7–10 sec.

Steps 2 and 3: As above for tasks to elicit BR

Task 10: Musical ball toy, 5 small balls and 1 large ball that doesn't fit (to elicit JA)

Step 1: E pushes SGD and says, "Let's play with a ball toy." E then brings out a bag with 5 small balls, gives one to Peer and shows him/her where to put it. E then says to Peer, "I want you to take turns with FC putting the balls in." Children each put in a ball. E then gives Peer the BIG ball and says, "Give this one to FC and wait to see if he/she notices that it is too big. Show him where to put it." E waits 7–10 sec.

Steps 2 and 3: as above for tasks to elicit JA

Task 11: Bumble balls (cow and pig), one works and one doesn't (to elicit BR)

Step 1: E pushes SGD and says, "Let's play with the cow." E brings out working bumble ball and shows the children how to make the bumble ball bounce, then offers it to Peer and says, "Now I want you to be my helper and show FC how it works." After Peer makes the ball bounce, E turns the ball off and tells Peer to give FC the nonworking ball and says, "Wait and see if FC will ask you for help with his/hers." E waits 7–10 sec.

Steps 2 and 3: As above for tasks to elicit BR

Task 12: Switch activated fan toy (to elicit JA)

Step 1: The fan is set out before the children come in the room, out of reach either on a shelf or at far end of the table but in view of the camera. If the Peer notices it first, E does not activate the fan and tells Peer, "We are going to wait and see if FC notices it before we play with it." When FC notices the fan, E scrolls through iPad pages to find the fan at any time in the sequence of the above 11 tasks. E then uses a foot-controlled switch to activate the fan and passes the switch to Peer and asks Peer to push the button out of sight of the FC. Then E tells peer to look expectantly at FC and wait to see if FC notices.

Steps 2 and 3: As above for tasks to elicit JA
