

## Supplemental Material S2. Caregiver EMT fidelity checklist measure .

### Engagement

#### 1. Physical Space.

The adult has defined a space for the child to play with preferred objects available and without too many distractions. The adult attempts to maintain this space throughout the session. Distractions should be set to the side or out of the way when possible. The goal is for the 'triangle of engagement' to be created between caregiver-child-toys.

*2 = set up/maintain a defined space + objects available + removal of distractions*

*1 = 1 or more criteria are missing OR criteria are not attempted to be maintained*

*0 = criteria not attempted*

#### 2. Follow Child's Lead.

The adult follows the child's lead when appropriate. Following the child's lead entails following the child's interests in play. If the child is playing with cars, the adult will also play with cars. Recruiting inappropriately occurs when the child is functionally engaged with a toy, but the caregiver tries to draw their attention to a different object in an intrusive way. The adult does not recruit the child to other materials when the ones the child is playing with can be used appropriately. Behavioral statements "sit down" "come here" when not already engaged don't count against them.

*2 = the parent doesn't recruit inappropriately more than 1 time*

*0 = recruits inappropriately more than 1 time*

#### 3. Imitate Actions

The adult joins in the child's play by immediately imitating their play actions appropriately. This could be dropping toys into a block tower, putting puzzle pieces in, making the animal figures 'walk', pushing cars, or any other play the child might engage in.

*2 =  $\geq 5$  examples*

*0 =  $< 5$  examples*

#### 4. Give

The adult attempts to hand the child different objects while verbally pairing them with their label to promote engagement. The caregiver may wait until the child takes the object to label it. The label must be the noun label of the object (car, block, etc.).

Telegraphic phrases do not count (red car, yellow block, etc.). Articles and linguistic others count (a block; the car; Oh, animals!)

*2 =  $\geq 2$  gives + labels*

*0 =  $< 2$  gives + labels*

#### 5. Respond and Pause

The adult responds to all child communication. The adult also waits at least 3 seconds before taking another turn. Percentages should be pulled from coded data for this item. Percentages should be pulled from timed-event sampled data for this item.

*2 =  $\geq 90\%$  responsiveness and  $\geq 70\%$  matched turns*

*1 = 1 criterion is below acceptable percentage*

*0 = both criteria are below acceptable percentage*

#### 6. Avoid Directive Statements

The adult uses a content word/words that are open-ended and that are not directive of children or overly questioning. Closed questions (e.g., those with a single answer, yes/no questions) are overly directive. Behavioral statements "sit down" "come here" when not already engaged don't count against them.

*2 = the parent doesn't give directions or ask closed questions more than 1 time.*

*0 = the parent gives directions or asked closed ended questions more than 1 time.*

### Language

#### 7. Target Language

The adult models singular object labels and simple active, declarative sentences (with location, description, and action predicates). This will be pulled from each session's timed-event sampled data.

*2 =  $\geq 75\%$  Target language*

*1 = 74.99-70.00 Target language*

*0 =  $< 69.99$  Target language*

#### 8. Expanding Language

The adult expands the child's language by adding words to create a Toy Talk sentence. Percentages should be pulled from coded data for this item.

*2 =  $\geq 40\%$  expansions*

*0 =  $< 20\%$  expansions*

*NA = child did not produce any expandable utterances during the session*

## 9. Point and Show

The adult clearly points to or shows objects while giving them their label (must be object label, but doesn't need to be target language) to make the object name more salient. Points are coded when the caregiver uses their index finger to gesture at an object, and states the noun label of the object simultaneously. The object may be in the child's hands, the caregiver's hands, or anywhere within the visual field of the child. A point does not count if it is done clearly outside of the child's visual field. Shows are when the caregiver has an object in their hand and presents it to the face of the child, and gives the item its noun label.

*2 =  $\geq 1$  point/show paired with a label*

*0 = 0 point/show with a label*

## 10. Pantomime

The adult pantomimes (or physically acts out; mimes) an action that either the child or the object is doing. This action needs to be paired with an active declarative sentence (e.g., "the alligator is chomping!").

*2 = pantomime combined with a simple ADS at least 1 time*

*0 = does not pantomime combined with a simple ADS*

## Play

### 11. Set the Focus of the Base Routine

The adult joins in play with the child and verbally sets the focus of the routine (e.g., "let's make a cake").

*2 = parent establishes at least 1 base routine when child is attending to the object(s) that will be used*

*0 = parent does not establish at least 1 base routine*

### 12. Add Objects

The adult adds objects to the play to grow the routine. Objects added must be paired with a label and set near toys currently being used in play, in the child's line of vision. Added objects are intended to grow a routine, not redirect the child to new toys (therefore, the child must already be engaged in play). To receive a code of "2", the adult must add at least 2 objects. This item is evaluated using timed-event sampling.

*2 = adds  $\geq 2$  objects paired with a label*

*0 = adds  $< 2$  object with a label*

### 13. Add Actions

The caregiver (1) imitates a child action and (2) extends play by adding a related action while pairing with an ADS. To count, the caregiver must add an action with the same object recently used to imitate the child's play. To receive a code of "2", the adult must add at least 2 actions. This item is evaluated using timed-event sampling.

*2 = adds  $\geq 2$  actions with an ADS within 5 s of imitating*

*0 = adds  $< 2$  actions with an ADS within 5 s of imitating*

### 14. Re-Start Play Routine

The adult re-starts a completed base play routine when appropriate. To receive a code of "2", the adult must re-start a base routine at least 1 time.

*2 = re-starts a base routine at least 1 time*

*0 = does not re-start a base routine*

### 15. Behavioral Strategies

The adult uses behavioral strategies to extend engagement and play (e.g., timers, first/then boards, countdown, HOH). To receive a code of "2", the adult must attempt to use behavioral strategies during episodes of challenging behavior.

*2 = a behavioral strategy is used to redirect challenging behavior*

*0 = a behavioral strategy is not used when needed*

*NA = no challenging behavior observed*

## Prompting

### 16. Frequency of Prompts / Initiations

This item is about whether or not a prompt was attempted and the rate at which they occurred. At least two prompts should be attempted to receive a score of "2". Prompts on average of more than 1x/min are too frequent and therefore are scored a "0".

*2 =  $\geq 2$  prompts attempted*

*0 =  $< 2$  prompts attempted*

### 17. Flexibility in Setting Up Strategies

The adult shows that they understand how to set up a prompt in more than one way (e.g., choices, inadequate proportions, assistance, waiting with a routine, waiting with a cue). A score of "2" can be given if two different types are attempted *or* one type with two different materials.

*2 =  $\geq 2$  types of prompts attempted*

*0 =  $< 2$  two types*

### 18. Quality of Prompting Episodes

This item is about the quality of the episode should be based off the coded data. Don't consider MLIs when scoring this item. This item is taken from timed-event sampled data.

Formula:  $ME3's / (ME3's + ME0's)$

*2 = ME3 on  $\geq 80\%$  of attempted episodes*

*1 = ME3 on 50-79.99% of attempted episodes*

*0 = ME3 on  $< 49.99\%$  of attempted episodes*

*NA = No scored milieu teaching episodes*

### 19. Appropriately Abandons

The adult appropriately discontinues prompting when the child loses interest (or they realize the child never had interest). This item is scored using timed-event sampled data.

*2 = adult always appropriately abandons milieu episodes*

*0 =  $\geq 1$  instance of not abandoning prompting when child loses interest*

*NA = No scored milieu teaching episodes*