

Executive Function Activities for 6- to 18-month-olds

These activities encourage infants to focus attention, use working memory, and practice basic self-control skills. During this stage of development, infants are actively developing their core executive function and self-regulation (EF/SR) skills. Supportive, responsive interactions with adults are the foundation for the healthy development of these skills. However, particular activities can strengthen key components of EF/SR.

In using these activities, adults should attend to the infant's interests and select activities that are enjoyable, while also allowing the infant to determine how long to play.



Lap games for younger infants

Generations of families have engaged babies in games while holding them in the lap. Different games practice different skills, but all are predictable and include some basic rules that guide adult and child behavior. Repetition helps infants remember and manage their own behavior to fit the game's rules.

■ **Peekaboo** — Hide-and-find games like this exercise working memory, because they challenge the baby to remember who is hiding, and they also practice basic self-control skills as, in some variations, the baby waits for the adult

to reveal him or herself. In other versions, the baby controls the timing of the reveal; this provides important practice regulating the tension around an expected surprise.

■ **Trot, Trot to Boston; This is the Way the Farmer Rides; Pat-a-Cake** — Predictable rhymes that end with a stimulating yet expected surprise are well-loved. Infants exercise working memory as they develop familiarity with the rhyme and practice anticipating a surprise, inhibiting their anticipatory reactions while managing high levels of stimulation.

Hiding games

Hiding games are a great way to challenge working memory.

■ **Hide a toy under a cloth** and encourage the infant to look for it. Once infants can find the toy quickly, hide it, show the child that you have moved it, and encourage the child to find it. Make more moves to increase the challenge. As the child remembers what was there and mentally tracks the move, he or she exercises working memory.

■ **Older infants may enjoy hiding themselves** and listening to you search loudly for them while they track your location mentally.

■ **You can also hide an object** without showing an older infant where it is and then allow the infant to search for it. He or she will practice keeping track of searched locations.

■ **Another challenging version** of these games involves putting a set of cups on a turntable (or "lazy Susan"), hiding an object under a cup, then spinning the turntable. Hiding more than one object can also increase the challenge.

Imitation or copying games

Infants love to copy adults. When they imitate, they have to keep track of your actions, remember them, wait their turn, and then recall what you did. In doing so, they practice attention, working memory, and self-control.

■ **These games have a variety of forms**, from taking turns making simple gestures (e.g., waving) to organizing toys in certain ways and asking children to copy you (e.g., placing toy

animals in a barnyard) or building simple buildings by putting one block on top of another and perhaps knocking them down to rebuild.

■ **As infants' skills improve**, make the patterns they copy more complicated.

■ **Adults can also demonstrate** ways to play with toys, like making a toy horse gallop or rocking a baby doll. This introduces the concept of using toys as symbols for real objects.

Simple role play

Older children in this age range enjoy doing the tasks they see you do.

■ **Take turns with any activity** that interests the child, such as sweeping the floor, picking up toys, dusting, etc. These games introduce the basics of imaginary play and practice working memory, self-control, and selective attention, because the toddler must hold the

activity in mind to complete it while avoiding distractions and inhibiting the impulse to do other things.

■ **Children can remember and play out** more complicated roles as they get older. They will also begin to initiate activities. Providing the necessary materials (e.g., a broom, a toy box, a dustcloth) can help children enjoy and sustain this type of play.

Fingerplays

Songs or chants with simple hand motions are a lot of fun for infants, and develop self-control and working memory as well as language. Infants can learn to copy the movements to a song and, with practice, will remember the sequence. *Eensy Weensy Spider*; *Where is Thumbkin?*; and *Open, Shut Them* are examples, but these fingerplays can be found in many languages and cultures.



Conversations

Simply talking with an infant is a wonderful way to build attention, working memory, and self-control.

■ **With younger infants**, start by following the infant's attention and naming aloud the things holding his or her attention. The infant will likely maintain his or her attention a little longer, practicing actively focusing and sustaining attention.

■ **As infants get older**, pointing out and

talking about interesting objects or events can help them learn to focus their attention on something the adult has identified. As babies learn language, they also develop their memory of what is said, eventually mapping words to objects and actions.

■ **Conversations in any language** besides English are also helpful. It has been found that bilingual children of many ages have better executive function skills than monolingual children, so experience using an additional language is an important skill.

Resources

Songs and games

- www.piercecountylibrary.org/files/library/wigglesticklesall.pdf
- www.turben.com/media-library/8702756_infanttoddlerplaybook.pdf
- www.zerotothree.org/child-development/grandparents/play-o-12-mths-final.pdf