



What are Executive Functions?

Emma Weaver – Director of the
Neurodiversity Early Years Service



This article explores executive functions, their role in early child development and how adults can support young children in developing their executive functions.

What are Executive Functions?

The phrase “Executive Function” refers to a set of skills that support a person’s ability to plan, organise, problem solve, store information, follow multiple step instructions and stay focused despite distractions. These skills help us to prioritise tasks, filter out distractions from the environment and control our impulses.

Why is it important to understand executive functions and early years?

During the first 5 years of life, the human brain develops at a rapid pace. This is known as a sensitive period of time and is a crucial moment in a person’s life and their development. There is a second “sensitive period” in adolescence.

Executive functions develop most rapidly between ages 3 – 5 years as this a “Sensitive period” of time where brain development thrives. Our genetic blueprint plays a role in the development of executive functions along with a child’s early experiences and access to opportunities to practice the skills. Early, reciprocal relationships act as the foundations for the development of these skills as the adult provides the framework for children to learn and practice. This is done using consistent routines, chunking

instructions/tasks, following rules, supporting independent self-regulation through co-regulation and promoting imagination.

Executive functions and Neurodiversity?

People with a neurodiverse profile may present with a weakness in the development of executive functions. A child with executive function challenges may struggle to plan and prioritise, organise and manage their time, hold things in their memory, sustain attention, control their impulses and regulate their emotions.

What can we do to support the development of executive functions?

It is important to note that executive functions are only starting to develop in the early years meaning that lots of children need support to develop the skills. Ages 3 – 5 years is the perfect time introduce activities to support the development of early executive functions. Play opportunities offer a chance for children to develop and practice new skills. Here are some ways that you can support:

- Encourage imaginative play – playing in the dolls house, dressing up as a character, reverse the roles (child to pretend to be dad and role play).
- Read together and ask the child to predict what might happen next, label how the characters are feeling, create their own story etc.
- Make feely bags at home – get a coloured draw string bag, fill it with objects and ask the child to put their hand in to grab an object. Before they pull it out of the bag, ask the child to guess what the object is.
- Hide and seek and peek a boo games are a great way to practice impulse control along with planning and organising behaviour.
- Opportunities to test themselves physically through climbing, obstacle courses. When a child is climbing or using an obstacle course they need to focus, pay attention, monitor what's happening and adjust their actions – great practice for executive function development.
- Play with puzzles – start with puzzles with fewer pieces and gradually build them up.
- Whisper games – encouraging the child to pay attention the word being whispered and to pass it on to a partner.
- Sing songs that repeat a phrase or add on – She'll be coming around the mountain ..., Five little speckled frogs, 10 in the bed etc.
- Play games that require impulse control – snap, jenga etc.
- Games like pairs can encourage a child to practice skills in storing information, problem solving, planning their next movement and controlling impulse.