



Executive Function & Self-regulation

Executive function and self-regulation are a child's 'air traffic' control systems.

Executive function and self-regulation helps children to manage emotions, control impulses, plan and prioritize, stay on task, problem solve and master new skills such as numeracy and literacy skills. A child's capacity to develop these 'systems' is dependent upon caregivers who can model these skills within safe and supportive environments.



Take it Further...

Learn about it...

Executive function & self-regulation (p.12 EYMH Common Message Paper)

Executive function encompasses a number of high-level cognitive skills such as inhibitory control, working memory and cognitive flexibility.

These foundational skills are essential for regulating more advanced emotions and skills such as:

- focus and attention,
- planning and goal setting,
- rule following,

- problem solving,
- impulse control,
- delaying gratification.

Take a deeper dive. Watch the following video.

[EXECUTIVE FUNCTION](#)

Talk about it...

Tell caregivers and colleagues about executive function and self-regulation

Executive function is the brain's "air traffic control" system. It helps children to simultaneously plan, monitor and manage multiple streams of information.

Self-regulation refers to how efficiently and effectively a child can handle and recover from stress.

Being able to manage and recover from stress creates the conditions necessary for a child to focus their attention and develop executive function skills.

Executive function and self-regulation promote other essential life skills that children need to succeed such as literacy and numeracy skills, working well with others and applying different rules in different settings.

Developing these skills is a long-term process which starts during infancy and continues to develop well into adulthood.

Language acquisition plays an important role in the development of executive function and self-regulation, as it helps children to:

- Label and reflect on their thoughts, feelings and actions.
- Make plans that they hold in their mind and implement.
- Understand and follow increasingly complex rules regarding their behaviour such as; getting along with others and engaging in play.

Try it... Moving from knowledge to practise

Encourage caregivers to:

1. Reduce children's stress.

Ensure that children have slept well, are fed and have opportunities to be active.

Limit and/or remove external stressors and stimulation such as television, radio, video games.

For some children, aids such as play dough to squeeze can be calming when stressed.

Protect children from toxic stress. Toxic stress redirects the brain's focus towards rapid stress responses, instead of planning and impulse control, negatively impacting executive function (Centre of the Developing Child at Harvard University, 2016).

2. Teach healthy coping strategies when children are calm. Help children manage stress by reading them stories such as '[Tucker the Turtle Takes Time to Tuck and Think](#)', practicing yoga and/or '[mindfulness](#)' so when stress comes their way they are better able to cope.

3. Give children opportunities to practise and strengthen executive function skills by:

- Providing a safe and supportive environment in which to learn and grow.
- Taking turns, managing transitions (e.g. stop one activity then start another) and staying on task.
- Problem solving through active and pretend play, conversation, storytelling and board games.
- Developing their 'working memory' through prompts such as 'first we do this....before we do that' and using visual schedules.
- Referring to the guide book: [Practicing Executive Function Skills with Children from Infancy to Adolescence](#) for further ideas.

4. Ensure children are on track with their development. Complete the [Looksee Checklist](#) and/ or other validated developmental screening tools. Seek help if a child is struggling in one or more areas of development.

5. Model executive function skills and self-regulation.



For more detailed information go to [Social-Emotional Development in the Early Years: A Common Message Paper \(2nd Ed.\)](#), published by the Halton Early Years Mental Health Committee (EYMHC) to provide professionals with common messages on early social-emotional development.

EYMHC Committee members:

Halton Region Health Department
Halton Region Social and Community Services
Reach Out Centre for Kids (ROCK)
Halton Children's Aid Society

ErinoakKids Centre for Treatment and Development
EarlyOn Child and Family Centres
Community Living Burlington

Our Kids Network (OKN) and EYMHC work in partnership to manage the [Early Years Mental Health Toolkit](#) on the OKN website.