



MEASURE WHAT MATTERS!

Supporting Executive Function: Your EF matters too!

By Rebecca Diefano

Previously we have talked about how parents can support executive function (EF) development in young children. Specifically, parenting behaviors that are “autonomy-supportive,” meaning they actively support a child's goals, efforts, and choices, are related to children's EF skills. What does an autonomy-supportive parent look like in everyday life? Let's think of an example of a parent working on a jigsaw puzzle with a preschooler. An autonomy-supportive parent would (1) offer the child choice by asking which puzzle pieces she wants to start with and which pieces to look for next, (2) provide the child enough support to accomplish more than she would on her own, (3) allow the child enough time to put pieces together on her own, but provide help when necessary, and (4) encourage the child when she does not get it right the first time and praise her when she succeeds.

We can think about autonomy-supportive behaviors as a nice middle ground between two extremes. On one end, parents provide excessive structure and control over the task. While doing a puzzle with their child, they might choose all of the pieces for the child, put in many pieces rather than letting the child have ownership over the puzzle, and might rush the child along at a pace that is too fast for her abilities. In this case, children are simply observers and are not given enough challenge to improve their EF skills. On the other end, parents do not provide enough support



and are uninvolved. While doing the same puzzle, these parents might let the child struggle for so long that she becomes discouraged or angry, offer very few hints that would help the child understand what to do next, and might allow the child to simply move onto another task if she cannot do it. In this case, the child is not able to complete any more of the puzzle than she would have done on her own, which also will not help to improve her EF skills.

A Study of Parents

At this point, you might be thinking this is a lot to keep in mind for something as simple as working on a puzzle with your child! Could a parent's own EF skills be playing a role? A recent study from our lab was conducted to better understand the links among parents' own EF skills, their autonomy-supportive behaviors, and their children's EF skills. We had 85 parents (72 mothers and 13 fathers) from a low-middle income community in the U.S. participate with their 3- to 5-year-old children. Parents and children each completed the MEFS, and then parents and children worked on a puzzle together

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for 10 minutes. We found that parents' EF is important for autonomy-supportive parenting. Imagine helping your own child with the same jigsaw puzzle described earlier. It might be tempting to simply put together many of the pieces while your child watches. But, children's own EF is bolstered when they experience the right amount of challenge to try things on their own. Instead, to be autonomy-supportive, parents need to use their **inhibitory control skills** to stop themselves from doing the puzzle, especially when their child is working very slowly. Parents also have to use their **cognitive flexibility** to switch between strategies for helping their child. Instead of saying, "Find the piece with the horse" repeatedly, they switch to another suggestion, "Can you find the pieces with red on them?" Finally, parents use their **working memory** to remember what suggestions they have already made and hold in mind the goals of the task.

Another important finding from our study was that one way parents' own EF skills influence their children's EF skills is through parents' use of autonomy support. Some may think that children simply inherit their parents' EF skills, like they inherit eye or hair color, but our study suggests that parenting behaviors may matter more. In fact, one possible reason that previous studies have found associations between parent and child EF skills is more likely to provide high quality parenting, which in turn bolsters children's developing EF skills.



Takeaway Messages

As our study found, good EF skills play an important role in parenting. However, daily stressors and hassles can negatively impact our own EF, so it is important to spend some time each day focusing on your own EF skills by incorporating some of the following tips:

- **Be Mindful of Your Own EF:** We all act impulsively or reactively sometimes, but taking a moment to pause and reflect on your options before responding means that you are using your EF skills to the best of your ability.
- **Decrease Stress:** Being stressed, tired, or even hungry can hurt our EF skills, so make sure to take some time for self-care. When your EF skills are in tiptop shape, your child will benefit the most from your interactions with them.
- **Set Aside Quality Time:** If time and space allow, try setting aside specific time during the day to work with your child on a task that will improve EF skills, like doing a jigsaw puzzle. When we are trying to work with our child on a puzzle while also making dinner, sending a few quick emails, and cleaning up the dog's mess, our EF skills are overwhelmed, which will likely impact our parenting in those moments.

Now that we have some tips for making sure our own EF skills are strong, what are some ways to become more autonomy-supportive?

- **Guide children's behavior rather than doing things for them:** "If you are not sure where that puzzle piece goes, you can look at the picture on the box."
- **Acknowledge frustration and provide support:** "It can be frustrating when a piece does not fit. What happens if you try turning it a little?"
- **Offer choices between just a few good options:** "Should we start with the blue sky or the green grass?"
- **Offer encouragement and praise effort:** "I can see that you are working really hard on getting that piece in and I think you can do it."

How to Get Kids to Focus Using Superheros



For young children, pretend play is so much more important than just having fun. In a recent study by Dr. Stephanie M. Carlson, University of Minnesota Professor and Reflection Sciences CEO and Co-founder, and U of MN alums Dr. Rachel White, Dr. Emily Prager, and Catherine Schaefer, children who pretend to be their strong-minded hero are more likely to persist at boring tasks and wait longer for rewards. One hundred and eighty children aged 4- to 6-years-old were asked to “be a good helper” and perform a long, tiresome computer task for as long as they could. They were told that if the chore got too boring, they could take a break and play on a nearby tablet.

In one group, the researchers gave children a prop, such as a cape or a crown, and asked them to pretend play to be a well-known cartoon superhero, such as Batman or Rapunzel. Over the next 10 minutes, they were periodically asked, “Is *Batman* or *Rapunzel* working hard?” This was referred to as the “**Exemplar Condition**”. The children in the other two groups were either periodically asked, “Am *I* working hard?” (First Person or Self-Immersed) or, using their own name, “Is — working hard?” (Third Person).

Those children who were invited to pretend play persevered on the tedious computer task on average 46% of the 10-minute period, compared to 36% for children in the third-person condition and 29% for those in the self-immersed condition.

Researchers speculate that pretending during this tedious task allows the children to see things from a completely different perspective. When we consider our situation from a distance, it can be easier to keep our “big picture” goals in mind, rather than getting distracted by temptations or fixating on what we are feeling right now. This “psychological distance” can be beneficial for children and adults alike!

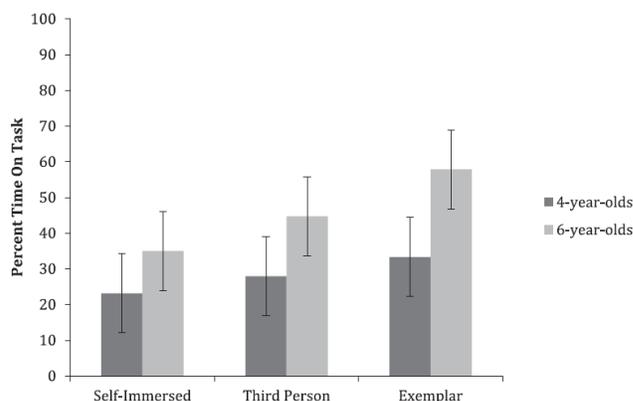


Figure 1. Percentage of time spent on work task by condition and age. Bars indicate 95% CI.

Click here for the full article in Child Development:
<https://doi.org/10.1111/cdev.12695>

Did you know?

When children have opportunities to develop **executive function** and **self-regulation skills**, individuals and society experience lifelong benefits. These skills are crucial for learning and development. They also enable positive behavior and allow us to make healthy choices for ourselves and our families.

Harvard Center on the Developing Child

