

## The Importance of Guided Play in Classrooms to Promote Children's Executive Functions

Stephen H. Bayley<sup>1</sup>, Maria Julia Hermida<sup>2</sup>, and Alessandra Gotuzo Seabra<sup>3</sup>

<sup>1</sup> University of Cambridge, Faculty of Education. Cambridge, Cambridgeshire, United Kingdom

<sup>2</sup> Universidad Nacional de Hurlingham- Consejo Nacional de Investigaciones Científicas y Técnicas (UNAHUR-CONICET), Villa Tesei, Provincia de Buenos Aires, Argentina

<sup>3</sup> Mackenzie Presbyterian University, Graduate Program in Human Development Sciences. São Paulo-SP, Brazil

### Author Note

Stephen H. Bayley  <https://orcid.org/0000-0002-5686-0160>

Maria Julia Hermida  <https://orcid.org/0000-0001-6835-7864>

Alessandra Gotuzo Seabra  <http://orcid.org/0000-0002-8373-7897>

Correspondence concerning this article should be addressed to Stephen H. Bayley, Faculty of Education, 184 Hills Road, Cambridge CB2 8PQ, United Kingdom. Email: shb42@cam.ac.uk

Executive Functions (EFs) comprise some of the most important mental processes for human thinking. Together, they play an essential role in helping us to regulate our thoughts and actions to achieve our goals. According to key literature, EFs include working memory (holding and manipulating information in one's mind), inhibitory control (resisting impulses, ignoring distractions, and delaying gratification), and cognitive flexibility (switching between mental sets and seeing things from different perspectives) (Diamond, 2006; Miyake et al., 2000). All these processes are critical for academic achievement, the emotion regulation needed for school adaptation, and a host of valuable later-life outcomes (Moffett & Morrison, 2020; Moffitt et al., 2011).

Evidence shows that EFs emerge and evolve throughout the first two decades of life, but their development is remarkably rapid during childhood (Garon, Bryson & Smith, 2008). Environmental factors like socioeconomic status, caregiver stimulation, and quality early childhood education influence EFs development. Similarly, children's play provides a significant opportunity for them to practice and improve their EFs, for example, by remembering the rules of the game, inhibiting acting out of character, and adapting flexibly to their friends' improvisation (Diamond & Lee, 2011).

Indeed, play is a vital activity for holistic human development. It creates a space for children to acquire and build essential cultural knowledge and skills that they will need to contribute to their communities and live in the modern world (Doebel & Lillard, 2023). However, play itself is a complex and multi-faceted phenomenon. It can be solitary or social, situated in the real world or imagined, free and spontaneous to follow children's choices, or guided by adult preferences. Different types of play appear to offer diverse benefits for child development, but the relative merits of free play versus guided play seem to present a dilemma for both psychologists and educators alike.

On the one hand, free play allows children to explore, create, and interact in their own way without the mentorship, pressures, or expectations of parents, teachers, or other caregiving adults. This can offer an opportunity for children to practice and build their independence, autonomy, and agency or to re-enact and process situations from their everyday experiences. Research by Barker and colleagues (2014) further highlights the benefits of children's participation in less-structured activities. They compared the time reported by parents spent by 6-7-year-olds in structured activities (such as adult-led lessons, homework, studying, and religious activities) and less-structured activities (including play, reading, watching television, and outings like museum visits). Their findings revealed that children who spent more time on less-structured tasks scored better on a verbal fluency task and displayed higher levels of self-directed EFs.

On the other hand, guided play has been related to better academic and psychological outcomes (Weisberg et al., 2013, 2016). It combines children's play and autonomy with clear aims and guidance from adults in organized situations and has shown benefits in terms of vocabulary, mathematics, spatial skills, motivation, stress, and behavioral problems. For example, Fuligni and colleagues (2012) examined the daily routine profiles in preschool programs for

low-income 3-4-year-olds and found the structured-balanced profile to be better associated with language skills and engagement in literacy and maths activities than the free-choice profile.

In reality, there is no question that both kinds of play are essential to children's development. However, a debate remains on which kind of play best supports which learning outcomes (Hartas, 2020). For EFs, in particular, further evidence highlights the potential value of *guided* play. Cavanaugh and colleagues (2016) analyzed the effects of a literacy-guided play program on the reading and behavior of kindergarten students. The children in the experimental group created their games and achieved significantly higher scores on a test of early literacy skills than the control group, which only participated in assigned activities. Qualitative measures also indicated better sequencing of ideas in cause-and-consequence tasks, emotional self-regulation, communication, and peer mediation, which pointed to the development of their various EFs.

Similarly, Weisberg and colleagues (2013) emphasize the superiority of guided play over free play or explicit instruction conditions. They suggest that guided play allows children to demonstrate greater flexibility and creativity, perhaps by encouraging them to focus on the essential elements concerning a specific learning purpose. In summary, these results suggest that guided play, especially for group activities, might provide more opportunities for children to control and regulate their thoughts and behaviors, at least when compared with free play conditions.

The relevance of these discussions and the balance between free and guided play is particularly pertinent for children in underserved communities worldwide. Children from less affluent families tend to engage in work duties and chores at a young age, which reduces their time for play and makes the content and impact of such playtime even more precious (Gaskins, 2013). Meanwhile, their access to formal early education, interventions, and initiatives is often more limited. Programs with suitable curricula and appropriate play could help to decrease the socioeconomic gaps in school achievement for students from low-income backgrounds (Fulgini et al., 2012).

Ultimately, these tensions beg the question: what is the purpose of play and its role in education? Children globally find space and time for free play, which enables them to connect with their peers and families, build creativity, process trauma, nurture their wellbeing, and practice social and other skills with fewer real-life consequences. However, guided play arguably also offers benefits that children may not necessarily access independently. Through guided play, adults can create the optimal conditions for children to develop and learn. Grown-ups can scaffold children to stretch, challenge and thereby increase their EFs. Thus, while opportunities for free play remain important, guided play for children in classrooms, schools, and other formal education settings appears to confer particular advantages for them in reaching their full EFs potential.

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