Using Clinical 'Prescriptions for Play' in Early Childhood to Build Resilience and Enhance Equity





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SUMMARY

- Play is essential to the experience of childhood and is any activity that is "intrinsically motivated, entails active engagement, and results in joyful discovery."
- High-quality play promotes executive functioning, social-emotional development, school readiness, language and math skills, and physical health, particularly for lower-income children.
- Play is a vital tool to buffer adversity and stress, and to help build resilience, for both children and caregivers.
- As safe, screen-free, and unstructured play has dwindled. 'prescriptions for play' are increasingly critical for optimal childhood development, health, resilience, and equity. They also boost caregiver outcomes, like learning-rich parenting practices, while reducing parental stress and depression.

Introduction

Play is essential to the experience of childhood. Clinical pediatrics, along with other child-serving professions, has long emphasized the importance of play to early childhood development, health, and resilience. In the last few decades, the presence of safe, screenfree, and unstructured physical play has dwindled. Pediatricians, viewed as trusted messengers, can play a vital role in educating caregivers about the importance of play to ensure that all children and caregivers can thrive.

Over the past few decades, the proliferation of screens like television, cell phones, and video games have significantly reduced time that children spend in play. From 1981 to 1997, children's free playtime decreased by 25% and a 2019 survey found that 65% of one- to four-year-olds were not engaging in enough play. The coronavirus disease 2019 (COVID-19) pandemic further increased screen time — by 52%, from a pre-pandemic baseline of 2.7 hours to 4.1 hours, according to a systematic review. Children under the age of five specifically engage with screens 66 minutes more per day post-pandemic.

These patterns have also varied based on socioeconomic status (SES) and neighborhood safety. Studies show **children in lower SES neighborhoods** engage in more screen time compared to children living in high SES neighborhoods. Additionally, children of parents who perceived their neighborhood to be most safe **spent roughly one hour less per day** in front of a screen and were 10% more physically active, compared to those who perceived their neighborhood to be least safe.

Amid this substantial displacement of free play in early childhood, play-focused educational interventions guided by healthcare providers are increasingly critical for optimal childhood development, buffering against stress, and developing the caregiver-child bond. Not only is high-quality play a vehicle for optimal childhood growth and development, but it also offers a key way of counter-acting childhood adversity and stress, important to consider in light of the burgeoning youth mental health crisis.

This issue brief explores key benefits of play in early child-hood and highlights impacts of healthcare-based play promotion programs, such as the Prescription for Play (P4P) initiative. Developed and funded by LEGO® Foundation and Group and currently delivered by Weitzman Institute, this program has pediatric clinicians educate caregivers of 18- to 36-month-olds about the importance of play, and equip them with the tools necessary to engage children in high-quality play.



The critical role of play in early childhood

At its core, play is **any activity** that is "intrinsically motivated, entails active engagement, and results in joyful discovery." These include early serve-andreturn interactions between caregivers and infants like smiling and peek-a-boo to later rough-and-tumble and imaginative play. Play assists in whole-child development, and can positively impact short and long-term developmental, social-emotional, academic, and health outcomes, especially for children in low- and middle-income households. It also fosters creativity, executive functioning, resilience, school readiness, academic achievement, and even adulthood success. Additionally, play with trusted caregivers or peers builds caregiver-child bonds and important social skills like cooperation and negotiation. Play, in part by encouraging physical activity, may even help prevent the development of health conditions like overweight and obesity, and related outcomes.

Play is also a vital tool to help build resiliency and buffer adversity and toxic stress—for both children and caregivers. Given the wide-ranging impacts of early adversity on health and social outcomes across the life course and a burgeoning youth mental health crisis, it's important to know that engagement in play can mitigate stress directly for both caregivers and kids, returning an activated stress response to baseline. It can build adaptive problem-solving and coping skills in kids, and has been found to improve stress-related health, such as reducing anxiety in preschool children, reducing externalizing and internalizing problems in seven-year-olds, and reducing parenting stress and de**pression** in caregivers. Play can also act as a protective factor for children — including in helping children cope with chronic health conditions and with their caregivers' stress, as the two are often linked. One study found that children who engaged in frequent pandemic-related pretend play experienced less of their caregivers' pandemic-associated distress, compared to those who did not.

Play has a spectrum of designations, but there are two main categories: free and guided, which can both be distinguished from games and direct instruction. Free play is voluntary, not organized by an adult or older child, and does not have a defined purpose or objective. Children who engage in free play benefit from enhanced curiosity, risk-taking, exploration, cognitive flexibility, coping, self-regulation, and executive functioning.

Guided play is still child-directed, but combines discovery and cooperative play with learning and skills development goals that are often guided by an adult or older child. Guided play installations in hospital waiting rooms, bus stops, and neighborhood playgrounds based on community engagement have shown improvements in **literacy, cognition, numeracy, executive function,** and parent-child interaction.

When caregivers—including parents, grandparents, guardians, childcare workers, home visitors, and educators—actively engage in play with children during early childhood, they enhance a child's play experience and its benefits. Not only do **children play longer** when their caregiver guides them during play, but children also engage in **more developmentally meaningful play** when they interact with their caregiver. Furthermore, play that includes caregiver-child interactions can result in better **behavioral**, social, and developmental outcomes. These include **promoting better social-emotional development**, **communication and language skills**, and the **development of future positive relationships with others**.

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Healthcare-based interventions to promote play

To counter-act the drastic reduction in play among young children, child-serving sectors must implement interventions to ensure their optimal development and health. One strategy to increase play in early childhood is to incorporate promotion of play into the pediatric clinical setting. Pediatric providers already consider promotion of play a core part of their charge, and in 2018, the American Academy of Pediatrics called for play to be embedded into anticipatory guidance for caregivers: "We're recommending that doctors write a prescription for play, because it's so important," said pediatrician Michael Yogman, MD, FAAP.

Several clinically-based, formalized play interventions have shown proven impacts over the past few decades. Sit Down and Play, a primary care-based program that encourages positive parenting behaviors through takehome play activities increased parenting activities that impact development, like play. The Video Interaction Project and Building Blocks program, which provides parental education and video-based coaching around interacting, reading, and playing with their infants in the pediatric setting enabled meaningful reductions in parental stress and depression in a randomized trial. The Video Interaction project has also improved the developmental trajectories of at-risk preschool children. Additionally, a randomized trial that distributed blocks and play instruction to caregivers of 18-month to 30-month-old children at a pediatric clinic showed better language acquisition six months later particularly in lower-income children — perhaps by displacing less linguistically rich activities like screen time.

Taken together, these studies demonstrate that the pediatric clinical setting offers an important space for caregivers to learn about play early and often enough to meaningfully affect a young child's developmental outcomes, often in ways that counteract existing social and health inequities. Importantly, these interventions can also increase parents' self-efficacy and ability to be successful as caregivers — while also decreasing the incidence of caregiver stress and depression, promoting resilience for the whole family.

Many clinical interventions are building off the success of Reach Out and Read (RoR), one of the most well-established and studied programs for supporting caregivers in creating meaningful learning opportunities with children. Established in 1989, RoR has clinicians distribute books and model learning-rich behavior at well-child checks from 6 months through age 5 years. A **twenty-year review** concluded that RoR enabled a new paradigm in pediatrics that involved "creating real-time learning experiences" by modeling developmentally appropriate strategies for caregivers, like pointing, naming, and asking questions. RoR has been credited with improving language development by **3-6 months** — particularly for lower-income children.

This review highlighted three factors that led to RoR's **implementation success:** 1) coordinated work by local pediatric leadership and nonmedical advocates; 2) rigorous assessment and evidence for impact; and 3) public and bipartisan financial and legislative support.

Prescription for Play

To understand what makes clinical play promotion programs accessible to caregivers and sustainable, the Weitzman Institute conducted a pilot study to assess the feasibility of integrating a simple "prescription for play" into well-child visits at a federally qualified health center, Connecticut Pediatrics at Community Health Center, Inc., in Hartford, CT.

Prescription for Play (P4P) is a free program in which a pediatric provider speaks to caregivers about the importance of play in well-child visits for children ages 18–36 months. Medical providers who participate in P4P are required to take a 15-minute training introducing them to the program and the importance of play in early childhood development. Providers then distribute one play kit per child that contains LEGO® DUPLO® bricks and educational materials for caregivers. In addition, providers are encouraged to integrate discussions about play and development into all of their 18- to 36-month-old visits.

The pilot study integrated perspectives from eight providers who completed the mandatory training alongside the perspectives of 30 caregivers through qualitative interviews and surveys that focused on changes in behavior, knowledge, attitudes, and clinical practices associated with more play. All participating providers reported they experienced a change in how regularly

they introduced play with their pediatric families. One provider stated, "It's a really nice reminder for me to talk about play. We know how important it is for development and we're often talking about development, but [P4P] is a really nice way to tie that into the visits."

The program helped caregivers understand how critical high-quality play is to their children and how they could implement it. "Playing with my child is more important than I thought it was... [I learned] how much they learn through play," one caregiver shared. Also, at one and three months post-P4P-visit, the majority of caregivers reported a change in the number of days per week they played with their child.

P4P also enhanced the well-child visits by building rapport among providers and families. "When you go to the doctor, kids are usually scared to go because they are expecting vaccinations and stuff," one caregiver noted. "So I feel like [the focus on play] removed the negative perspective that my son had about going to the doctor, and the toy just made it fun."

While the program has experienced a positive reception from the pilot study, it must be studied on a larger scale. From this pilot study, the Weitzman institute is conducting a multi-site case study focused on the P4P program's implementation features critical to success and associated patient and family outcomes.

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- Participating Prescription for Play Provider



Looking ahead: Optimizing 'prescriptions for play'

High-quality play promotes optimal executive functioning, social-emotional development, school readiness, language and math skills, and health for children. Play also strengthens the crucial caregiver-child bond to support safe, stable, and nurturing relationships and buffers both caregivers and children against toxic stress — boosting the whole family's ability to withstand stress and adversity. In the last few decades, the presence of safe, screen-free, and unstructured physical play has dwindled and screens are an almost certainty. So now more than ever, clinically-based play interventions like P4P are needed to refocus families on play.

Play-focused clinical interventions — or 'prescriptions for play'— have been shown to improve both child and caregiver outcomes, including child development, language acquisition, and learning-rich parenting practices, while reducing parental stress and depression. Importantly, these interventions help caregivers to more deeply understand the importance of play to their child's well-being and how to play in ways that are best suited to their child's developmental needs. By equipping caregivers with learning-rich tools and behaviors, these programs boost caregiver self-efficacy, expand the toolkits they have at hand, and enable greater stress buffering and resilience. Caregivers end up being more empowered, capable, connected, and healthier — and so do their children.

As 'prescriptions for play' scale and gain traction through broader support by child-serving practitioners, advocates, policymakers, and funders, these interventions have the power to bridge existing social and health inequities. Given the broad benefits of play-focused clinical interventions in early childhood, local pediatric and nonmedical advocates for child development can work within their communities to encourage participation and collaboration with programs that encourage play. Alongside these efforts, policymakers and advocates can begin to establish public and bipartisan financial and legislative support for these resources and interventions.

By enabling better development, health, and resilience for all families they touch regardless of background, clinical play-focused interventions can ultimately help usher in greater equity in a number of critical domains. When pediatric clinicians partner with caregivers to 'prescribe' high-quality play routinely, everyone stands to benefit through the new trajectories, potential, and resilience unlocked through the power of play.

Acknowledgments

This brief was developed through funding provided by The LEGO® Group and Foundation. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of The LEGO® Group or Foundation.

For more Information on the Prescription for Play Program visit **Rx4Play.org** or email us at **P4P@mwhs1.com**.