

Handout 3.1 Environment – Ask the Expert



Drs. Lori Erbrederis Meyer and Tricia Catalino Answer Questions about Early Childhood Environments

What Does the Research Say?

There is consensus among research findings that early childhood development is the result of interactions between a child’s unique biological and genetic characteristics and experiences in their environment. In fact, there is evidence that environmental factors can affect biological characteristics even before conception. The relationship between the child and the environment is also dynamic—whereas the environment influences the child’s development, the child also changes the environment. When we think about research on the environment and its impact on young children’s development, we think of it as all-encompassing. The research relates to and intersects with features found within the natural environments where children spend their time such as at home, child care programs, community settings (e.g., stores, parks, restaurants, library), and community-based programs (e.g., family play groups, library story hour).

A bulk of research on the environment and child development explores the quality of the natural environments in which young children live, grow, and learn. Studies on environmental quality include investigations of physical, social, and temporal features of the environment as well as both distal (e.g., neighborhoods, communities) and proximal (e.g., home, childcare) environments to the child. It is well documented that children who grow up in environments with toxic stress (e.g., crime, abuse, neglect), pollution (e.g., air, noise, water contamination), crowdedness, or without consistent, nurturant caregiving have poor developmental outcomes compared to children whose environments are safe, secure, and supportive.

Studies on the effects of inclusive environments for young children show positive outcomes for both young children with disabilities and their typically developing peers. Creating accessible environments through Universal Design for Learning (UDL) or by adapting and modifying the environment improves socialization, language development, and mobility for young children with disabilities. There also is evidence that individualized solutions using assistive technology for communication, mobility, and self-help/adaptive skills improves outcomes for children with disabilities across domains as well. An area for continued investigation is the implementation of high-quality inclusion and environmental practices that are responsive to the increasingly diverse population of children and families in the United States.

Finally, research on the importance of physical activity for young children draws attention to the cumulative effects of inactivity over a lifetime—especially when inactivity begins at an early age. Children with disabilities experience secondary health conditions like obesity, diabetes, and hypertension at a higher rate than children without disabilities. Physical or cognitive impairments affecting a child’s ability to move, explore, and control their environment limits their opportunities to learn. Multiple studies link early movement and mobility to children’s growth and learning across developmental domains.

Why Is This Important?

It is important for practitioners to understand the immediate and cumulative effects of any environment on children's development and that the environment is fundamental to every interaction a child might have with people, materials, space, and even time. Considering the role of the environment during assessment, planning, and interventions is essential to foster positive outcomes across all domains of development. Further, research notes that children's placement in high-quality early care and education environments alone does not increase their opportunities to learn and be socially included. Adults have an important responsibility for shaping environments and experiences to promote children's development and learning.

Reflecting on the environments that hold young children with and without disabilities, it is important to ensure that adults' and peers' interactions with children within these environments, and the environments themselves, ensure that children will be fully included and gain membership. Professionals are creating environments, and in collaboration with families, organizing the learning environments for young children. It's important to consider how the practices used may limit or extend opportunities for children to participate and learn in across the environments in which they find themselves.

Professionals have the opportunity to shape the environments they find themselves in for the better. They can change their own practice, positively influence the practices of others, and advocate for the policies, resources, and supports needed to sustain high-quality environment-related practices.

Why Is This Important for Children with Disabilities?

The largest and most comprehensive studies on the impact of the environment on child development included young children who were typically developing from families with a low socioeconomic status.

However, environmental features are a determinant of health and development that may be confounded for a child with a disability. Children with disabilities may not only be most at risk to the cumulative effects of non-nutritive or toxic environments, but also to environmental influences that limit daily learning opportunities, thus limiting their chances to fulfill their potential. Special considerations are needed to ensure that children are being appropriately supported and challenged within their environments and that professionals and families feel confident and competent in their role of influencing multiple features of natural environments for young children.

Bottom Line

There are a number of elements and features of the environment that can alter and impact children's learning trajectory. Yet, there is an ever-growing collection of evidence-based practices that help families and professionals shape environments to fully support young children with disabilities; ultimately, providing the necessary opportunities required to increase children's capacities to learn and flourish.

About the Experts

Lori Erbrederis Meyer, Ph.D. is an Assistant Professor in the Department of Education at the University of Vermont where she teaches in the Early Childhood Education and Early Childhood Special Education programs. Dr. Meyer's research focuses on young children with disabilities and their families within the context of pre-kindergarten and early elementary experiences. Specifically, she is interested in contemporary classroom environments and processes used by administrators and teachers to meet the social-emotional needs of young children with delays or disabilities. As a former inclusive early childhood teacher, Dr. Meyer is dedicated to increasing the use of evidence-based/recommended practices in the field of early childhood intervention and translating research into practice.

Tricia Catalino, PT, DSc, PCS is an associate professor of the School of Physical Therapy at Touro University Nevada where she teaches pediatrics, lifespan development, professional practice, ethics, and advocacy. Dr. Catalino is also the Chair of the Touro University Nevada Institutional Review Board. During her almost 20 years of practice, Dr. Catalino has served children with disabilities and their families in the early intervention (EI) setting. She writes and speaks on topics related to pediatric physical therapy. She is an ABPTS pediatric clinical specialist and the Chair of the APTA, Section on Pediatrics, EI Special Interest Group. Dr. Catalino is a member of both the Division for Early Childhood (DEC) Recommended Practices Commission and the DEC Executive Board.
