Background

About Children and Screens

Children and Screens: Institute of Digital Media and Child Development is an independent, interdisciplinary 501(c)(3) nonprofit organization based in New York. Children and Screens seeks objective, scientific answers to questions about the cognitive, psychological, and physical impacts of digital media on toddlers, children, and adolescents — and seeks to understand how this population interacts with media at home, with friends, at school, and in their communities.

We are committed to the following aims:
- Advance objective scientific research and increase research funding in the emerging field of digital media and children;
- Develop human capital in the field — for instance, by providing a forum for researchers, clinicians, and other experts from a wide variety of disciplines to meet, collaborate, and share research; and
- Raise awareness about key issues and provide the public, parents, clinicians, educators, and policymakers with resources and information to make informed decisions.

With leadership from its founder, Dr. Pamela Hurst-Della Pietra, Children and Screens is guided by a National Scientific Advisory Board made up of experts from diverse disciplines who bring their expertise to bear on complex questions at the intersection of children and digital media. Children and Screens also has a Board of Trustees that provides governance and organizational advice and a network of hundreds of medical and social scientists, educators, and neuroscientists active in the field who provide support and guidance. In addition, Children and Screens has established informal partnerships with a number of organizations working in this area.

Children and Screens understands that it is not enough to look at questions of digital media use among children from a single perspective — whether medical, educational, or sociological. Rather, effective research requires a multidisciplinary, comprehensive, "kaleidoscopic" approach. For this reason, Children and Screens staff, partners, and colleagues represent a wide range of fields, including pediatrics, child psychiatry, child psychology, neuroscience, communications, public health, and education. By bringing together experts from across both the medical and social sciences, Children and Screens seeks to broaden how the field is defined, the types of questions that can be asked, and the kinds of impacts that can be investigated.

By fostering scientific research and collaborations, Children and Screens is working to address three urgent questions:

1. How is digital media enhancing and/or impairing children's ability to live happy, healthy, and productive lives?
2. How are years of electronically mediated interactions shaping children's physical, cognitive, emotional, and social development?
3. What should we do about it?

Inaugural Scientific Conference

In 2015, Children and Screens joined forces with the National Academy of Sciences (NAS) to convene nearly 200 of the most experienced researchers, scientists, and clinicians at the intersection of digital media and child development for a three-day interdisciplinary conference. The Sackler Colloquium on *Digital Media and Developing Minds*, held at NAS in Irvine, California, provided scientific experts from a variety of complementary intellectual disciplines with a rare opportunity to compare, contrast, and combine their technical knowledge about topics of shared interest. These exchanges served to establish and consolidate an important foundation of pooled knowledge about emerging technology, child development, and digital media, setting the stage for groundbreaking future collaborations in several key areas.

Digital Media and Developing Minds was unique in the breadth of expertise it brought together, including representatives from neuroscience, cognitive science, child psychiatry, pediatric medicine, communications, effects research and informatics, developmental psychology, behavioral psychology, sociology, education, content creation and distribution, and public policy.

Dr. Hurst-Della Pietra challenged the conference participants to do the following:
1. Assess the current state of scientific knowledge regarding how digital media influence child development at multiple ages and multiple stages;
2. Leverage the relationships formed at the conference to initiate and sustain dialogue among medical researchers, practitioners, social scientists, educators, policymakers, and funders;
3. Establish a prioritized national research agenda; and
4. Devise practical, actionable, and evidence-based recommendations that parents, clinicians, and teachers can use to make digital media a more consistently constructive influence in children's lives.

Pediatrics Supplement

As a result of the 2015 inaugural conference, scientists and researchers launched 22 interdisciplinary workgroups with an aim to study what currently is and is not known about the effects of digital media on children. The workgroups were made up of 140 experts from a diverse background of disciplines, institutions, and perspectives. Research spanning the fields of psychiatry, psychology, neuroscience, physiology, sociology, anthropology, communications, education, law, public health, and public policy informed their work. The result of the groups' collaboration and research is published in the November 1 Supplement in the journal *Pediatrics*, through the support of Children and Screens. The information and conclusions set forth in the supplement are solely the products of each individual workgroup and its authors and do not reflect the views of Children and Screens itself.

The Supplement is organized to address three broad yet interconnected areas on topics related to the field of children and media:

1. **Cognitive, Psychosocial, and Physical Effects**: Topic areas include how screen time and media affect learning, attention, obesity, sleep, youths' sense of self, youth well-being, and risky behaviors such as addiction and screen use while driving.
2. **Effects on Family, Society, and Culture**: Topic areas include how screen time and media affect the parent–child relationship, privacy in the era of "Big Data," digital media literacy, youth civic engagement, and digital inequality.
3. **Media Content**: Topic areas include how screen time and media affect aggressive behavior, sexuality and sexual behavior, cyberbullying, children's perceptions of advertising and marketing, and children's views of themselves and others via media stereotypes.

November 1, 2017, Summit Panel Discussion

Coinciding with the release of the *Pediatrics* Supplement, on Wednesday, November 1, Children and Screens hosts an interdisciplinary summit with pediatric media experts, researchers, advocates, and policymakers on what is known and what still needs to be learned about the relationship between kids and screens — while offering a roadmap for policymakers, government agencies, clinicians, educators, and the public.

Panel speakers:
● **Pamela Hurst-Della Pietra, DO**, Founder and President, Children and Screens; Clinical Assistant Professor in Health Care Policy and Management, Stony Brook Medicine
● **Dimitri Christakis, MD, MPH**, Director of the Center for Child Health, Behavior and Development, Seattle Children's Hospital Research Institute; Professor of Pediatrics, University of Washington; Member, National Scientific Advisory Board, Children and Screens
● **Ellen Wartella, PhD**, Professor of Communication, Psychology, Human Development, Social Policy, and Medical Social Sciences, and Director, Center on Media and Human Development, Northwestern University; Member, National Scientific Advisory Board, Children and Screens
● **Kaveri Subrahmanyam, PhD**, Associate Director of the Children's Digital Media Center, University of California, Los Angeles/California State University, Los Angeles; Director, Media and Language Lab, California State University, Los Angeles
● **Kathryn Montgomery, PhD**, Founder, Center for Media Education; Director of Communication Studies, American University

Panel speakers and invited guests will highlight key topic areas, including the following:
● **Cognitive effects of children using screens:** Why do we need to be concerned about "media multitasking"? Is the internet making my children smarter? Do we understand the effects on critical thinking and memory? What is the effect of giving my toddler an iPad?
● **Internet, social media, and gaming addiction:** What do we know about internet, gaming, and social media addiction? Why is it so hard to pull our children off of video games? What are the benefits and harms of social media use at different ages? Will social media lead to loneliness or narcissism, or will it help build up my teen's self-esteem and sense of well-being?
● **Very early introduction of digital media:** What age is best to introduce my young children to interactive media? How much does screen time affect the developing brains of very young children? What are the best strategies for parents interacting with their toddlers and screens?
● **Other unintended consequences:** What might be the repercussions of requiring middle school students to use tablets? Is our media-heavy culture affecting the socialization of our children, and what, if anything, should we do about it? Will my children think sexting is the new normal when they become teenagers? What can we do about the monitoring and datification of our children?

Research and Policy Agendas for the Future — and Guidelines for Parents

A national research agenda

There is now enough sound basic knowledge to pose truly ambitious, important, fundamental research questions about how digital media affect children's mental and physical development and well-being. For example, we are ready to ask, "What are the quantity, quality, and character of media content reaching children today? Which informational attributes account for different children's responses to different digital media? What are the consequences of pervasive, immersive media exposure for children's bodies, minds, and social experiences?" Drawing on a pool of collective knowledge and collaborating for nearly two years, more than 130 experts across many disciplines developed a comprehensive national research agenda so that these questions can be properly addressed and understood. With more than 100 discrete research trajectories, this prospectus for future scientific inquiry will help us focus on the most salient and pressing issues facing children and families. This is critically important as digital media expands its reach and influence on young and developing lives in the years ahead. Please sign up at the registration table of the Interdisciplinary Summit or send a request to info@childrenandscreens.com if you would like to be sent a copy of this agenda.

A policy agenda

How do children's and adolescents' mental processes and brain mechanisms change for good or ill because of the digital media to which they are exposed? Could new or evolving policies be formulated and implemented to adaptively and beneficially guide this? The overwhelming initial evidence has informed us of an urgent need to advocate for policies and programs that support an enlightened and healthy media environment for children. Children and Screens, with the assistance of the Policy workgroup, is calling for federal policymakers and agencies to create an inter-agency initiative that is homed at the National Institutes of Health (within an existing Institute, such as the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development or the National Institute of Mental Health) and is devoted to digital media and child health, to help protect children and ensure that they grow up happy, healthy, and able to reach their full potential. In a separate report, Children and Screens discusses overarching recommendations for this new initiative, and workgroups examine various specific issues—including the "dataveillance" of children, the implications of violent media, cyberbullying and social media, the unprecedented amount of advertising confronting our children, and teen texting while driving—and make a number of useful suggestions that will positively affect youth and families.

Parenting guidelines

The ever-present, complex, and evolving media ecology has posed challenges for 21st-century parenting and has set up a dual dynamic in many homes—one of increasing dependence on media as a parenting tool versus a nexus of anxiety and conflict surrounding media use. Parents are concerned about appropriate media use and the best media-related parenting practices. With this in mind, Children and Screens asked its interdisciplinary experts to provide support by offering evidence-based guidance to help manage media use in the home. It is important to understand that these are only guidelines. Be conscious that the example you set has the biggest influence on your children's media behavior. Nothing substitutes for trusting your own instincts, being aware of your children's needs and dispositions, and being mindful about the media you give to your children.