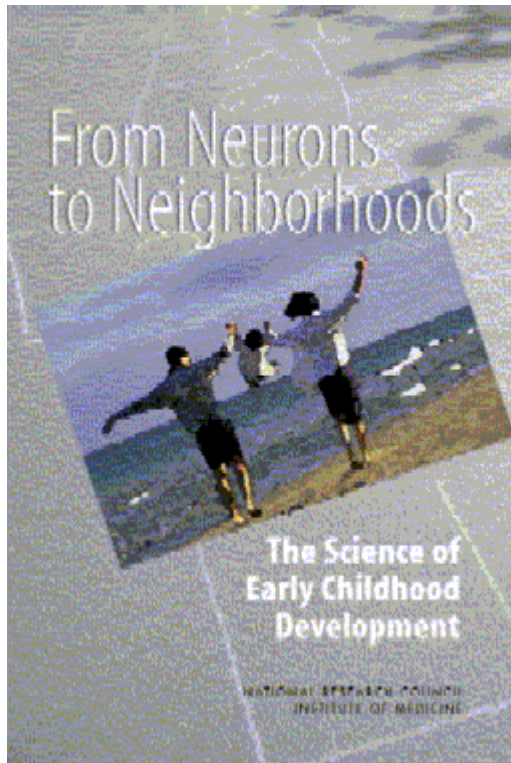


From Neurons to Neighborhoods: The Science of Early Childhood Development



Committee on Integrating the Science of Early Childhood Development

**Board on Children, Youth, and Families
Institute of Medicine
National Research Council**



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Putting the Study in Context

- **Explosion of knowledge** in neurobiology and the behavioral and social sciences
- **Marked transformations** in the **social and economic circumstances** under which families are raising young children
- At a time when scientific advances could be used to strengthen early childhood policies and practices, **knowledge is frequently dismissed or ignored and children are paying the price**

CONCLUSIONS





Take-Home Messages

- The traditional **nature versus nurture** debate is **simplistic** and **scientifically obsolete**
- **Early experiences** clearly influence **brain development**, but a **disproportionate focus on birth to three** begins too late and ends too soon
- **Early intervention programs** can improve the odds for vulnerable children, but **those that work are rarely simple, inexpensive, or easy to implement**



Take-Home Messages

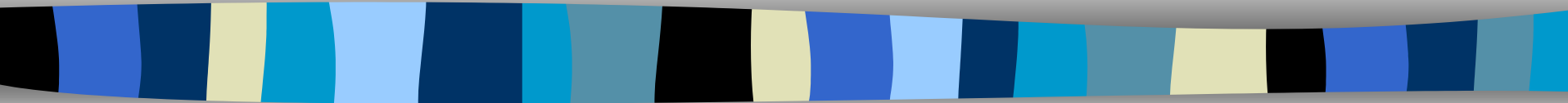
- How young children **feel** is as important as how they **think**, particularly with regard to **school readiness**
- Healthy early development depends on **nurturing and dependable relationships**
- **Culture** influences all aspects of early development through **child-rearing beliefs and practices**



Take-Home Messages

- There is **little scientific evidence** that special “stimulation” activities above and beyond normal growth-promoting experiences lead to **“advanced” brain development** in early childhood
- **Substantial scientific evidence** indicates that poor nutrition, specific infections, environmental neurotoxins, drug exposures, and chronic stress can **harm the developing brain**
- Significant **parent mental health problems, substance abuse, and family violence** impose **heavy developmental burdens** on young children

RECOMMENDATIONS FOR POLICY AND PRACTICE





Need for Greater Attention to Social-Emotional Development and Mental Health Needs

- Early childhood programs must **balance the focus** on **cognition and literacy skills** with comparable attention to the **emotional and social development** of all children, including those with special needs
- Greater commitments must be made to address significant **mental health problems** in young children by establishing clear policy and practice **linkages among child protective services, welfare reform, mental health agencies, early intervention programs, and primary health care**
- Major investments in **professional development** are essential to address unmet needs



Need to Recognize the Significance of Early Childhood Caregivers and Educators

- The early childhood years lay a **foundation** that influences the **effectiveness of all subsequent education efforts**
- **Public expenditures** for early care and education must be invested in **high quality** programs that promote **sustained relationships with qualified personnel**
- Major **investments** must be made to enhance the skills and compensation of **providers of early care and education**



Need to Enhance Supports for Working Families

- **Tax, wage, and income-support policies** should be reassessed to assure that no child supported by a working adult lives in poverty
- **Family and medical leave** should be expanded to cover all working parents, and strategies should be explored to provide income replacement
- The exemption period should be lengthened before states require parents of infants to work as part of **welfare reform**



Interactions Among Knowledge, Policy, and Practice Demand Dramatic Rethinking

- Need to **reduce long-standing fragmentation** of policies and services
- Need to reconcile **traditional early childhood program strategies** with the **increasing cultural diversity** and the **economic and social realities of current family life**
- Need to change the **politicized context of program evaluation** which results in a **high stakes environment** that undermines honest attempts to **improve quality**

CONCLUDING THOUGHTS





Urgent Need for a New Public Dialogue

Moving beyond blaming parents,
communities, business, or government

Rethinking the balance between individual
and shared responsibility for children