

Social paediatrics and early child development – the practical enhancements: Part 2

Jane Bertrand MEd¹, Robin Williams MD^{2,3}, Lee Ford-Jones MD⁴

J Bertrand, R Williams, L Ford-Jones. Social paediatrics and early child development – the practical enhancements: Part 2. *Paediatr Child Health* 2008;13(10):857-861.

Parents have central and critical influence in the health, learning and development of their young children. The physician plays a key role in supporting this role of parents, and there are practical health interventions that practitioners can promote in everyday practice that are coherent with the population-based evidence related to childhood outcomes. Four child development enhancers are recognized – emotional awareness, reading books, appropriate discipline and preschool programs including appropriate play opportunities. The child's physician can give clear messages about why each enhancer is important and what parents can do to use them to create nurturing environments for their children. The present article provides the evidence for these interventions and a series of coordinated physician activities that will enhance the early learning opportunities of the first few years of life, for improved trajectories for health and well being.

Key Words: Discipline; Emotional awareness; Literacy; Parenting; Play child development; Social paediatrics

Parents are the first and overwhelmingly the most powerful influence on young children's health, learning and development. Families live in, and belong to, multiple communities that can support – or thwart – their ability to support young children's optimal development. Part 1 of the present article, which was published in the November issue of *Paediatrics & Child Health*, made the case for a paradigm shift for paediatricians in their training and work with young children and families away from solely early identification and interventions for disease, to one that supports the concept of the World Health Organization Ottawa Charter's definition of health as a "resource for everyday life" (1) – away from a complaint-response practice framework to one of health-enhancing for all. The article focused on the central and critical role of parents and on practical interventions that primary care physicians could promote in everyday practice that could enhance children's developmental trajectories. The article briefly summarized the evidence in each area and listed primary care paediatric activities that would enhance the early learning opportunities of the first few years of life, for improved trajectories for health and well being (Figure 1, page 757).

PARENTING

For parents, the paediatrician's voice is a credible one and can change parenting behaviours (2-5). Paediatricians give parents

La pédiatrie sociale et le développement du jeune enfant – les améliorations pratiques : Partie 2

Les parents ont une influence centrale et critique sur la santé, l'apprentissage et le développement de leur jeune enfant. Les médecins jouent un rôle essentiel à soutenir le rôle des parents, car ils peuvent promouvoir des interventions de santé concrètes dans leur pratique quotidienne, qui respectent les données probantes en population reliées au devenir des enfants. Quatre stimulateurs du développement de l'enfant sont pris en compte : la sensibilité émotionnelle, la lecture de livres, une discipline pertinente et des programmes préscolaires, y compris des possibilités de jeu pertinentes. Le médecin de l'enfant peut expliquer clairement pourquoi chaque stimulateur est important et comment les parents peuvent les utiliser afin de créer des environnements dynamiques pour leur enfant. Le présent article fournit les données probantes étayant ces interventions et une série d'activités coordonnées par le médecin pour améliorer les possibilités d'apprentissage des quelques premières années de vie, afin de favoriser une meilleure trajectoire en matière de santé et de bien-être.

permission to learn about the skills of parenting – skills that are not innate, but must be learned by each generation. Parents struggle to do the best they can for their children and they often express poor self-confidence in their knowledge and practice as parents (6). Paediatricians can respect a wide spectrum of child-rearing values that are cast in culture and personal history, while offering information grounded in our growing knowledge base about child development and parenting styles. In one American study (3,7), almost one-half of all parents surveyed had concerns about their child's language or behaviour, but fewer than one-half of them recalled any developmental assessment by a health care provider. Most parents were not receiving information about optimal pathways of development for their children, or information that would help them in their parenting.

Right from birth, parents feed and shelter their child, allowing him or her to integrate sensory stimulation – sight, sound, touch, movement and smell. Infant engagement with their parents is nurtured by back and forth chains of communication with their caregivers, using vocalizations, gestures, facial expressions and body movements. When parents regularly respond to their infant's emotional cues, brief exchanges in early infancy gradually develop into sustained, coregulated chains of communication. Infants seek patterns and begin to recognize the familiar voices and faces of family members; in turn, responses to infant cues set a dynamic system in motion.

¹School of Early Childhood, George Brown College, Toronto; ²Niagara Region Public Health Department, Thorold; ³Department of Pediatrics, McMaster University, Hamilton; ⁴Department of Paediatrics, The Hospital for Sick Children and University of Toronto, Toronto, Ontario

Correspondence and reprints: Ms Jane Bertrand, School of Early Childhood, George Brown College, Toronto, Ontario M5T 2T9.

Telephone 416-415-5000 ext 3008, fax 416-415-2565, e-mail jbertran@georgebrown.ca

Accepted for publication September 18, 2008

They acquire the ability to engage in purposeful behaviours of their own, such as taking their mother by the hand and leading her to the kitchen cupboard and gesturing and vocalizing to get the cookie they want. A preschool child's growing ability to think symbolically emerges as a result of attending to and mastering his or her caregiver's meaningful use of sounds or gestures in increasingly complex problem-solving interactions. This is accompanied by the emerging ability to represent experiences (including feelings, intentions and actions) in words, play, drawings, block constructions or other symbolic forms. Parents can question, challenge, offer choices and actively engage in play that expands a child's ability to build bridges between ideas, connect feelings, facts and new understandings about how the world works. First hand, concrete experiences shape ideas that can be expressed symbolically in drawings, paintings, dramatic play, and in verbal and written forms. As children grow, families offer learning opportunities that are based on the deep knowledge they have of their children. This can take the form of conversations in the home, shared reading, outings, recreational activities and other meaningful moment-by-moment experiences. Also children, much the same as all mammals, are predisposed to explore their worlds through play with other children.

In Part 1, four child development enhancers were introduced – emotional awareness, reading books, appropriate discipline and preschool programs (Figure 1, page 757). Paediatricians can give some clear messages to all parents about why each enhancer is important and what parents can do to use them to create nurturing environments for their children.

EMOTIONAL AWARENESS

Humans, much the same as all other mammals, are born with a number of mechanisms to promote mother-baby attachment. Newborns are perceptually attuned to the human face, voice, touch, taste and even movements, with a marked preference shown to the primary caregiver (7-9). Infants have reflexive behaviours that automatically evoke caregiver responses, the most important of which are crying, smiling, gazing, cooing and imitation (10). Mothers can hear their infant crying in very noisy environments, they can reliably distinguish between the crying of their own infant and other infants (11), they can distinguish between their own infant's smell and that of other infants (12), and they can fine-tune their responses to help their infant master verbal, social and cognitive skills (8). Fathers respond similarly when they are directly involved with their newborns (13).

But infants and young children need more. From birth onward, optimal healthy development requires an emotional awareness from parents that is conscious and immediate (10,14). Attunement is a sharing of emotional space in which the parent's responses align, respond and participate in the state the infant is experiencing (14,15). Parents who are attuned to their infant's early communications respond back with full attention and emotional engagement. Attunement in the moments of daily life shifts from individual interactions

between infants and parents to an enduring relationship characterized by interdependence, intense mutual feelings and strong emotional ties. Known as attachment, this relationship sets the template for later relationships, emotional intelligence, social behaviours and problem-solving (16-20).

Child-driven play is an opportunity for parents to fully engage with their children. By following their child's lead during play episodes, parents respond, reciprocate, appreciate and connect with their child's unique perspective (2,8). Regular, sustained play interactions between parents and children sustain the inevitable ups and downs of long-term parent-child relationships and provides a consistent, durable platform for connecting with young children.

Predictable, regular schedules and routines underpin effective nurturing (3,8,21). Too many transitions and unpredictable changes in schedules and environments can undermine the ability of infants and young children to be engaged and comforted by their parents or by others.

Physician messages

- Encourage parents to read the baby's cues and follow the infant's lead.
- Encourage parents to build up back and forth communication through babbling, gestures, laughs, cries, facial expressions and words.
- Encourage parents to spend daily unstructured child-driven play time with their child.
- Encourage parents to visit drop-in programs (neighbourhood Ontario early years centres, parenting centres or family resource programs) and meet other new parents.
- Encourage parents to participate in home visiting, parenting programs, and seek credible online and telephone sources of guidance and help in their communities.
- Encourage parents to find child care arrangements that are characterized by responsive relationships between caregivers and children.

READING BOOKS

Reading books early sets in motion a cascade of learning and development that supports early brain development. It is a full brain work out. First, reading books drives multiple sensory pathways that underpin children's ability to relate, understand and explore their world (22). Beginning in infancy and continuing through the preschool years, children acquire the fundamentals of the tools they need to survive – in our culture, those tools are literacy, numeracy and inquiry skills. If reading books is part of a child's daily life from infancy onward, they are drenched with opportunities to set in motion the prerequisites for essential literacy, numeracy and inquiry skills (23).

Literacy is an assembly of many skills including oral language, understanding of narrative, phonics and letter recognition. A rich verbal vocabulary acquired in the first three years sets the foundation for literacy (24). Basic skills and facts are

meaningless if they are not part of a larger context (25). Information and skills become knowledge when facts are combined with concepts (9). Literacy emerges when children mimic the reading and writing process. Children derive meaning from text by combining a growing sense of story and the structure of language with the idea that print represents spoken language and thoughts. Children's ability to derive meaning from print text is further enhanced with greater understanding of letter-sound relationships and word recognition (25).

Reading books with children can begin in infancy and extends into the school years. American paediatricians developed a program called Reach Out and Read that consists of three practices that are incorporated into regular office visits – guidance about reading aloud, picture books to take home and community volunteers who read in the waiting room (25). Studies indicate that such a program does increase book reading in homes and improves outcomes in reading abilities in early school years (24,25).

Surveys (22,26,27) of parents in Canada indicate that approximately 60% of parents read to their children on a daily basis and that daily reading is lower for children younger than 18 months of age.

Physician messages

- Emphasize to parents the multiple benefits of reading to their children from very early ages through the school years.
- Prescribe daily reading with young children beginning at eight or nine months of age (even on a prescription pad).
- Encourage parents to read in the child's first language; parents who have difficulty reading should be encouraged to tell stories based on the pictures in the books.
- Encourage parents to read a picture book and point out children's evolving abilities to 'read'.

APPROPRIATE DISCIPLINE

The socialization of children to learn to live together and get along with others begins early as infants learn to move about on their own. As infants become toddlers, they assert themselves and try out their growing autonomy. They explore the boundaries of their world and find out what is okay and what is not.

Parents are on the frontlines in guiding behaviour. How parents discipline children over a range of situations creates a child-rearing climate (10,26) that influences children's development. Parenting skills related to behaviour guidance cluster into four broad styles of parenting (26,28) – authoritative, authoritarian, permissive and chaotic.

- 'Authoritative parents' monitor their children's behaviour, respond to their needs, set reasonable boundaries and encourage increasing independence. While setting firm limits with their children, authoritative parents present options, discuss alternative ways of behaving and encourage independence.

- 'Authoritarian parents' are generally controlling and sometimes harsh in their approach to discipline. They are less flexible and lack responsiveness and warmth.
- 'Permissive parents' are characterized as overly indulgent and set few limits for behaviour. Permissive parents provide few standards for behaviour and are extremely tolerant of misbehaviour.
- 'Chaotic parents' are inconsistent in their approach, and their own problems seem to interfere with their capacity to care for their children. They tend to be uninvolved with their children and may have issues of mental health and drug or alcohol abuse.

The authoritative parenting style is found to be the most effective approach. This constellation of parenting practices is related to better behaviour and learning outcomes for young children (29,30). Physical punishment is not an effective disciplinary strategy; children learn that violence is an acceptable reaction (10). Children's ability to manage stress and challenges diminishes when they face harsh and punitive reactions to their behaviour. They become less likely to explore or practice new skills.

Physician messages

- Remind parents that listening, caring and guiding through effective and developmentally appropriate discipline are the cornerstones of parenting.
- Be clear with parents that physical punishment is not effective and may be detrimental.
- Encourage parents to seek child care arrangements that are characterized by the appropriate disciplinary practices.
- Remind parents that parenting is a skill, not an innate ability, and recommend sources of good parenting advice including local community family resource programs, parenting centres, parenting groups, Web sites, parent resource centres, early years centres and public health departments.
- Encourage parents to seek out experiences that offer working models of reflective practice – 'learning by doing'.

PRESCHOOL PROGRAMS

Preschool programs are organized group programs for children between two and five years of age, including play groups, nursery school, child care centres, Head Start programs or child development programs (22). Children have opportunities for sustained interactions with other children in planned environments, guided by early childhood educators. The result is a powerhouse combination that launches children's development on positive trajectories before school entry. Affluent families have long valued early education and since the 1960s, Canadian and American governments have set up programs targeted to poor children (31). Today, economists, neuroscientists, educators and developmental psychologists agree that a good preschool is one of the smartest investments that governments and families can make in our children's future in this complex, pluralistic and competitive world.

TABLE 1
Sequence of levels of play

Social levels of play (21,48)	
Solitary	Children play alone
Parallel	Children play alongside other children with similar toys or materials with little interaction or influence on each other's play
Associative	Children take part in separate activities, but do exchange toys and comment on each other's behaviour
Cooperative	Children orient their activity toward a common goal
Cognitive levels of play (21,49,50)	
Functional	Simple, repetitive motor movements with or without objects
Constructive	Creating or building something
Make-believe	Acting out everyday and imaginary roles
Games with rules	External rules guide play

But there is a big 'but' – the programs must be quality programs that maximize preschool learning and development. Poor-quality preschool programs are not wise investments, and they can actually harm a child's development. Good preschool programs are programs that view preschool children as competent, active and curious individuals. Their exploration with each other and the world around them is the centre of planning and activities. Early childhood educators are trained professionals who are able to assess children's development and monitor their progress, design the environment, plan and guide activities, and coach parents with respect (32).

Play accelerates early learning and is the pedagogy in practice in good preschools (8,33-35). Play is how young children make sense of the world and is an effective method of learning for young children (36). Ideas and skills become meaningful, tools for learning are practised and concepts are understood. Play captures a child's attention when it offers a challenge that is within the child's capacity to master.

Developmental psychologists have identified a predictable sequence of play levels that form a framework for understanding social and cognitive development (Table 1).

Sociodramatic play, a combination of constructive, make-believe and cooperative play levels, is especially common in preschool play when children have opportunities for joint make-believe. Sociodramatic play promotes children's ability to create and manage complex plots, resolve disputes through negotiation, regulate their own emotions and behaviour, and typically integrate print symbols into their narratives (21,36).

It is critical for physicians to understand the processes of sociodramatic play. Children who thrive in primary school and whose pathways are set for later academic success are those who enter grade 1 with strong oral communication skills, are confident, able to make friends, are persistent and creative in completing tasks and solving problems, and are excited to learn (21,37-40). These are the same qualities that children strengthen through high-quality sociodramatic play.

Cognitive research points to the role of sociodramatic play in literacy acquisition (23,38,41). Symbolic play requires children to determine tasks and goals and carry them out, and provides opportunities for narrative recall and use of complex

language. Children in complex pretend-play situations use more advanced language and have higher levels of narrative structure than they do in other situations. Children become storytellers, creating new versions of familiar stories and composing new stories. The ability to use narrative and more advanced oral language are linked to later reading comprehension and fluency (42,43). When literacy materials are embedded within play settings in preschool, kindergarten and multiage programs, studies (23,36,41) find increases in children's use of literacy materials and engagement in literacy acts. By using and creating environmental print in their pretend play, children begin to understand what reading is and how print works. Pretend play helps children develop schemas and scripts as organized mental structures that are applied to understanding print.

In sociodramatic play, children use methods of inquiry including data collection, predicting, recording and talking about findings. Adults can introduce problems into the environment that engage children's curiosity and provide opportunities for them to apply and reinforce their problem-solving skills.

Sociodramatic play is not all about the three R's (44). It is a platform for preschool children's physical activity and creativity. Sociodramatic play is about negotiation and getting along with others, often overcoming different perspectives and backgrounds. It is what motivates and drives preschool exuberance and delight.

Early childhood educators choreograph the developmental dance. They follow children's lead and expose them to opportunities. Early childhood educators inject small amounts of focused direct instruction based on the needs of the child, into the daily play and routines to support emergent literacy, numeracy and inquiry skills (36,44-47). They ensure that the daily schedules and routines allow children opportunities to stay engaged in their play with each other without too many interruptions and transitions (36).

Physician messages

- Tell parents about the long-term value of sociodramatic play and emphasize the benefits of regular, organized play opportunities in early childhood programs with other children no later than 2.5 years of age for optimum socioemotional, cognitive and physical development and for later school learning.
- Ensure that parents do not devalue play in favour of early academic activities and structured games that limit children's physical activity levels, reduce their opportunities for socialization and diminish their opportunities to explore and understand the world around them.
- Encourage parents to find child care arrangements that include opportunities for play with other children in a planned environment guided by early childhood educators.
- Encourage parents to stabilize the child's daily life with as few transitions as possible.

CONCLUSION

The present article and its companion, have focused on the physician's role in supporting the central and critical role of parents in the lives of their young children. It briefly reviews the evidence for known interventions that promote a positive environment known to enhance early learning and care. It outlines a series of coordinated physician messages for parents in each area discussed.

REFERENCES

- World Health Organization. Ottawa charter for health promotion. <http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf> (Version current at October 16, 2008).
- Ginsburg KR; American Academy of Pediatrics, Committee on Communications; American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics* 2007;119:182-91.
- Halfon N, Inkelas M. Optimizing the health and development of children. *JAMA* 2003;290:3136-8.
- Shonkoff J, Phillips D. *Neurons to Neighbourhoods*. Washington, DC: National Academic Press, 2000.
- Oldershaw L. A National Survey of Parents of Young Children. Toronto: Invest in Kids, 2002.
- Minkovitz C, Strobino D, Mistry K, et al. Healthy steps for young children: Sustained results at 5.5 years. *Pediatrics* 2007;120:658-88.
- Halfon N, Olson LM. Introduction: Results from a new national survey of children's health. *Pediatrics* 2004;113:1895-8.
- Greenspan S, Shanker S. *The First Idea: How Symbols, Language and Intelligence Evolved from Our Primate Ancestors to Modern Humans*. Cambridge: Da Capo Press, 2004.
- National Scientific Council. *The Science of Early Childhood Development: Closing the Gap Between What We Know and What We Do*. Boston: Center on the Developing Child at Harvard University, 2007.
- Berk L. *Infants, Children and Adolescents*, 6th edn. New York: Pearson Publishing, 2008.
- Russell JA, Douglas AJ, Ingram CD. Brain preparations for maternity – Adaptive changes in behavioural and neuroendocrine systems during pregnancy and lactation: An overview. *Prog Brain Res* 2001;133:129-35.
- Kaitz M, Meirov H, Landman I, Eidelman AI. Infant recognition by tactile cues. *Infant Behav Dev* 1993;16:333-41.
- Mate G. In the Realm of Hungry Ghosts: Close Encounters with Addictions. Toronto: Knopf Publishing, 2008.
- Gallese V, Eagle M, Migone P. Intentional attunement: Mirror neurons and the neural underpinnings of interpersonal relations. *J Am Psychoanal Assoc* 2007;55:131-75.
- Rose L. Fathers of full-term babies. In: Tracey N, ed. *Parents of Premature Infants: Their Emotional World*. London: Whurr, 2000:105-16.
- Sroufe LA, Egeland B, Kreutzer T. The fate of early experience following developmental change: Longitudinal approaches to individual adaptation in childhood. *Child Dev* 1990;61:1363-73.
- Elicker J, Englund M, Sroufe LA. Predicting peer competence and peer relationships in childhood from early parent-child relationships. In: Parker RD, Ladd GW, eds. *Family-Peer Relationships: Modes of Linkage*. Hillsdale: Erlbaum, 1992:77-107.
- Erikson MF, Sroufe LA, Egeland B. The relationship between quality of attachment and behavior problems in preschool in a high-risk sample. In: Bretherton I, Waters E, eds. *Growing Points in Attachment Theory and Research*. Monographs of the Society for Research in Child Development, 1985:147-66.
- Erikson MF, Korfmacher J, Egeland B. Attachments past and present: Implications for therapeutic intervention for mother-infant dyads. In: *Development and Psychopathology*. New York: Cambridge University Press, 1992:495-507.
- Egeland B, Kalkoske M, Gottesman N, et al. Preschool behaviour problems: Stability and factors accounting for change. *J Child Psychol Psychiatry* 1992;31:891-909.
- Berk L, Shanker S. *Child Development*, 2nd edn. Toronto: Allyn & Bacon, 2006.
- McCain M, Mustard F, Shanker S. *The Early Years Study 2*. Toronto: Council of Early Child Development, 2007.
- Neuman S, Dickinson D, eds. *Handbook of Early Literacy Research*. New York: Guilford Press, 2001.
- Hart B, Risley T. *The Social World of Children Learning to Talk*. Baltimore: Paul H Brookes Publishing Co, 1995.
- Needlman R, Klass P, Zuckerman B. Reach out and get your patients to read. *Contemp Pediatr* 2001;19:51-69.
- Willms JD, ed. *Vulnerable Children*. Edmonton: University of Alberta Press, 2002.
- Kuo A, Franke T, Regalado M, Halfon N. Parent report of reading to young children. *Pediatrics* 2004;113:1944-51.
- Baumrind D. *Early Socialization and the Discipline Controversy*. Morristown: General Learning Press, 1975.
- Baumrind D. Parenting style and adolescent development. In: Lerner RM, Petersen AC, Brooks-Gunn J, eds. *Encyclopedia of Adolescence*. New York: Garland, 1991:746-58.
- Maccoby E, Martin J. Socialization within the context of the family: Parent-child interaction. In: Mussen P, ed. *Handbook of Child Psychology (Vol 4)*. New York: Wiley, 1983.
- Kirp D. *The Sandbox Investment: The Preschool Movement and Kids-First Policy*. Cambridge: Harvard University Press, 2007.
- Government of Ontario. *Early Childhood Educators Act*. Toronto: Government of Ontario, 2007.
- Berk L, Winsler A. *Scaffolding Children's Learning: Vygotsky and Early Childhood Education*. Washington, DC: National Association for the Education of the Young Child, 1995.
- Kagan SL, Britto P. *Going Global with Indicators of Child Development*. UNICEF Final Report. New York: UNICEF, 2005.
- Kagan SL, Lowenstein AE. School readiness and children's play: Contemporary oxymoron or compatible option? In: Zigler EF, Singer DG, Bishop-Josef SJ, eds. *Children's Play: The Roots of Reading*. Washington, DC: Zero to Three Press 2004:59-76.
- Hewes J. *Let the Children Play: Nature's Answer to Early Learning*. Montreal: Early Childhood Learning Knowledge Centre, 2006.
- Bennett J. *Starting Strong: Curricula and Pedagogies in Early Childhood Education and Care*. Paris: Directorate for Education, OECD, 2004.
- National Research Council. *Eager to learn: Educating our Preschoolers*. Washington, DC: National Academic Press, 2001.
- Sylva K, Melhuish E, Sammons P, Siraj-Blatchford I, Taggart B. *The Effective Provision of Pre-School Education [EPPE] Project*. London: Institute of Education, University of London, 2004.
- Maggi S, Irwin L, Siddiqi A, et al. *Analytic and Strategic Review Paper: International Perspectives on Early Child Development*. Vancouver: Human Early Learning Partnership, UBC, 2005.
- Ziegler E, Singer D, Bishop-Josef S. *Child's Play: The Roots of Reading*. Washington, DC: Zero to Three Press, 2005.
- Roskos K, Christie J. Examining the play-literacy interface: A critical review and future directions. In: Ziegler E, Singer D, Bishop-Josef S, eds. *Child's Play: The Roots of Reading*. Washington, DC: Zero to Three Press, 2005:95-124.
- NICHD Early Child Care Research Network. *Child Care and Child Development: Results from the NICHD Study of Early Child Care and Youth Development*. New York: The Guilford Press, 2005.
- Clarke-Stewart A, Allhusen VD. *What We Know About Childcare*. Cambridge and London: Harvard University Press, 2005.
- Kagan S, Kauerz K. Preschool programs: Effective curricula. In: RE Tremblay, RG Barr, RDeV Peters, eds. *Encyclopedia on Early Childhood Development*. Montreal: Centre of Excellence for Early Childhood Development; 1006:1-5. <<http://www.excellence-earlychildhood.ca/documents/Kagan-KauerzANGxp.pdf>> (Version current at October 16, 2008).
- Schweinhart L. Preschool programs. In: RE Tremblay, RG Barr, RDeV Peters, eds. *Encyclopedia on Early Childhood Development*. Montreal: Centre of Excellence for Early Childhood Development; 2006:1-7. <<http://www.excellence-earlychildhood.ca/documents/SchweinhartANGxp.pdf>> (Version current at October 16, 2008).
- Siraj-Blatchford I, Sylva K, Muttock S, Gilden R, Bell D. *Research Effective Pedagogy in the Early Years*. London: Department for Education and Skills, 2003.
- Parten M. Social participation among preschool children. *J Abnorm Soc Psychol* 1932;27:243-69.
- Rubin K, Fein G, Vandenberg B. Play. In: Hetherington EM, ed. *Handbook of Child Psychology, Vol 4: Socialization, Personality and Social Development*, 4th edn. New York: Wiley, 1983:693-744.
- Smilansky S. *The Effects of Socio-Dramatic Play on Disadvantaged Preschool Children*. New York: Wiley, 1968.