



Parenting skills

Last update: July 2025

Topic Editor:

Richard E. Tremblay, PhD, Université de Montréal, Canada and University College Dublin, Ireland

Table of content

Synthesis	6
Animal models of maternal behaviour: insights into our understanding the endocrinology, neurobiology, genetics and development of mothering ¹ EMIS AKBARI, PHD, ² KATHLEEN WONCH, MA, ² ALISON S. FLEMING, PHD, FRSC, AUGUST 2015	9
Parent Support Programs and Outcomes for Children BARBARA DILLON GOODSON, PHD, DECEMBER 2014	16
Community-Based Parent Support Programs CAROL M. TRIVETTE, PHD, CARL J. DUNST, PHD, DECEMBER 2014	22
Parent Support Programs and Early Childhood Development: Comments on Goodson, and Trivette and Dunst JANE DRUMMOND, PHD, DECEMBER 2014	29
Parenting Styles and Child Social Development LEA BORNSTEIN, BA, MARC H. BORNSTEIN, PHD, DECEMBER 2014	34
The role of parents in early childhood learning SUSAN H. LANDRY, PHD, DECEMBER 2014	38
Parents' Role in Fostering Young Children's Learning and Language Development CATHERINE S. TAMIS-LEMONDA, PHD, EILEEN T. RODRIGUEZ, PHD, DECEMBER 2014	45
The Role of Parents in Children's School Transition PHILIP A. COWAN, PHD, CAROLYN PAPE COWAN, PHD, DECEMBER 2014	54
Parent Supervision to Prevent Injuries to Young Children	60

Parent-Child Relationships in Early Childhood and Development of Anxiety & Depression 69

JENNIFER L. HUDSON, PHD, DECEMBER 2014

Parent Management Training Interventions for Preschool-Age Children 75

ROBERT J. MCMAHON, PHD, MARCH 2015

Social-Contextual Determinants of Parenting 85

JAY BELSKY, PHD, DECEMBER 2014

Parenting Programs and Their Impact on the Social and Emotional Development of Young Children 92

DANIEL S. SHAW, PHD, DECEMBER 2014

Parents' Attitudes and Beliefs: Their Impact on Children's Development 99

JOAN E. GRUSEC, PHD, TANYA DANYLIUK, BA, DECEMBER 2014

Can Changing Parental Knowledge, Dysfunctional Expectations and Attributions, and Emotion Regulation Improve Outcomes for Children? 104

MATTHEW R SANDERS, PHD, ALINA MORAWSKA, PHD, DECEMBER 2014

Sources, Effects and Possible Changes in Parenting Skills: Comments on Belsky, Grusec, and Sanders and Morawska 115

JACQUELINE J. GOODNOW, PHD, DECEMBER 2014

Parenting and Sleeping Problems and Universal Parenting Programs 120

HARRIET HISCOCK, MBBS, FRACP, MD, DECEMBER 2014

Topic funded by:



Margaret & Wallace McCain
Family Foundation

Synthesis

How important is it?

Parents differ in the degree to which they *respond to* children's signals and *control* their behaviours. High quality caregiving, characterized by a sensitive, cognitively stimulating, and moderately controlling approach, is crucial for children's development and safety. Indeed, many of the skills children acquire during the early years are fundamentally dependent on the quality of their interactions with their parents. For instance, parents play an important role in fostering children's early learning (e.g., language and problem-solving abilities) and in shaping their social-emotional skills (e.g., emotion regulation, reactivity to stress, and self-esteem). Furthermore, parents have an influence on the development, maintenance, or cessation of children's positive and/or negative behaviours. The quality of parenting children receive during the early years affects three key determinants of later success in school: their cognitive potential, their social skills, and their behavioural functioning. Considering the fact that parenting skills can be acquired and passed on from one generation to another, continuous efforts to improve the quality of caregiving are important.

What do we know?

Why parents behave the way they do?

The caregiving approach adopted by parents is influenced by interactions between personal and environmental factors. These include a) children's characteristics; b) parents' characteristics; and c) the broader social context in which the family is living.

Children and parents' characteristics

While sensitive-responsive parenting is generally associated with positive emotionality in children, irritable or aggressive children tend to receive less supportive, if not problematic parenting. More specifically, parenting characterized by inconsistent, rigid or irritable explosive discipline, as well as low supervision and involvement, is closely related with the development of child conduct problems.

However, it is important to keep in mind that parents are differentially affected by the behaviours and temperament of their child. Parents' level of *warmth/acceptance* and *permissiveness/restrictiveness* is influenced by the way they interpret and react to their child's behaviours, their expectations about their child's ability, and their own psychological functioning. Parents who are able to understand the causes of their child's distress and who are confident about their parenting abilities tend to be more nurturing, comforting, and assertive. In contrast, parents who believe their child has more power than them in difficult situations tend to use less effective parenting practices by becoming either hostile or submissive. Similarly, parents who have inaccurate beliefs or poorer understanding of developmental milestones tend to be less sensitive to their child's signals. Finally, parents' own psychological functioning can influence their caregiving approach. For example, there is emerging evidence that parents who experience anxiety are inclined to adopt an overprotecting style of parenting. As much as responsive parenting is fundamental for the cognitive, social, and emotional development of young children, parenting behaviours that emphasize overprotection may promote avoidance and the development of anxiety.

Socio-cultural context

Parenting practices are also influenced by the socio-cultural context. While an *authoritative* parenting style (balanced levels of control and permissiveness) is normative and associated with positive child outcomes in white middle-class families, this positive association does not prevail in all cultural and socio-economic backgrounds. Indeed, a flexible parenting style is not necessarily optimal for children growing up in high-risk neighbourhoods. In fact, these children may benefit from an *authoritarian* parenting style (high levels of control and low levels of permissiveness) as it has the potential to reduce the risk for negative developmental trajectories.

What can be done?

A large number of parent support programs exist to strengthen parenting skills and promote the development of new competencies. Parent support programs have a common goal— to improve the lives of children and their parents — and a shared strategy — to affect children by creating changes in parents' attitudes, knowledge and/or behaviour through a variety of social and practical supports. These include case management that links families with services, education on child development and parenting practices, and social support through relationships with

service staff and other parents.

With the increased recognition that parenting is influenced by a range of factors that might compromise its functioning, several programs have extended their focus by offering support for parents' self-care (e.g., depression, birth-control planning), marital quality, and/or economic self-sufficiency (e.g., improving educational, occupational, and housing resources). Ultimately, these programs aim to give parents the knowledge and skills they need to carry out child-rearing responsibilities effectively and provide their children with experiences and opportunities that promote child learning and development.

There are a number of parent support interventions that have been shown to improve behaviours in preschool-age children, including Helping the Noncompliant Child, the Incredible Years, Parent-Child Interaction Therapy, Triple P (Positive Parenting Program). Based on previous research findings, parenting programs tend to be effective when they cover multiple domains, including the child's and family's social ecology, target specific behaviours or developmental transitions, offer peer support, and involve parents (e.g., through role-modelling). Continued research is needed to evaluate child and parenting outcomes in a broader variety of cultural and socioeconomic groups. Likewise, more research needs to be conducted on the specific role of fathers' cognitions and child-rearing attitudes in children's development.

Lastly, it is essential that decision-makers reach out to vulnerable families during the preschool years, as these families are the hardest to involve in parenting programs (obstacles due to language, location, and/or hours of availability). By facilitating their involvement in parenting programs, these families will have the opportunity to change some of their parenting behaviours and beliefs, which may ultimately buffer children who are at risk of poor developmental outcomes because of genetic vulnerability, low birth weight, low socio-economic status, or cumulative environmental risks, among others.

Animal models of maternal behaviour: insights into our understanding the endocrinology, neurobiology, genetics and development of mothering

¹Emis Akbari, PhD, ²Kathleen Wonch, MA, ²Alison S. Fleming, PhD, FRSC

¹Atkinson Centre for Society and Child Development, University of Toronto, Toronto, Canada

²Department of Psychology, University of Toronto, Toronto, Canada

August 2015

Introduction

New mothers experience a multitude of physiological changes that under optimal conditions may function to prime them to respond ‘maternally’ to their infants. These perinatal changes include enormous fluctuations in the levels of circulating hormones and changes in brain systems known to regulate mothering in a number of species. In addition, there are changes in other brain regions that indirectly affect mothering-related behaviours such as how rewarding mothers find infants and their cues to be, their attitudes towards infants and parenting, their ability to be flexible and playful, to show good memory, as well as their levels of anxiety and depression. Included among maternal behaviours in humans are feeding or nursing, providing safety and warmth, and expression of ‘sensitive’ and contingent interactions with their infants and, often, positive feelings of nurturance. Under conditions of extreme stress, ill health, immaturity, and adverse early and present experiences, these maternal behaviours and the priming effects of physiology, are often altered or diminished.

Optimal caregiving has been shown to affect brain, behaviour and socio-emotional development of the offspring.^{1,2} Children rapidly acquire new motor, verbal, socio-emotional and cognitive skills that are accompanied by changes in their parental needs.³ As infants transition into toddlerhood, parents are expected to adjust their parental behaviours and strategies to not only comfort, but also to stimulate, direct and discipline their child. Positive and responsive parenting, that includes warmth and positive affect,⁴ have been shown to enhance many aspects of child development and to help protect children from certain environmental adversities and undesirable outcomes; in contrast, lack of parental warmth and responsivity, along with hostile-

reactive, rejecting parenting in the absence of a social ‘buffer’ (supportive relative, friend, or professional) are associated with behavioural problems, poorer cognitive outcomes, increased risk for child psychopathology, depression/anxiety and other chronic illnesses.

Subject

Understanding the experiential, physiological, and neural regulation of normative maternal behaviour greatly informs treatment and intervention programs designed to optimize maternal responsiveness in those experiencing parenting challenges. For example, factors such as post-partum depression, difficult child temperament, poverty, or marital conflict, may lead to alterations in maternal responsiveness, in turn increasing the likelihood of problems in child development.

Problems

To understand what contributes to mothering, one can examine mothering behaviour at four basic levels of analysis related to causality and motivation: (1) proximal (hormonal/neural/genetic); (2) developmental (mother’s own early experiences); (3) functional (survival of offspring); (4) and evolutionary. All contribute to our understanding, but none are complete individually when trying to understand a complex reproductive behaviour.

Research Context

Animal models of maternal behaviour have provided insights into our understanding of the endocrinology, neurobiology, genetics and development of mothering.^{5,6} By also providing models of parental-like behaviours among non-mothers (females that have not given birth), animal studies also illustrate how parental behaviour, albeit in the absence of lactation, may develop through simple extended exposure to young and in the absence of effects of hormones.⁷ Recently, studies have begun to translate what we have learned from non-human models of mothering behaviour and examine whether similar principles govern the psychobiology of human mothering.⁸ Early studies suggest that they do. This body of work uses diverse methodology, including hormonal measures^{9,10} genotyping^{11,12} questionnaires,^{13,14,15} and behavioural quantification of parenting^{10,16,17}, all of which have demonstrated excellent validity and reliability. With advances in human neuroimaging techniques such as fMRI and fNIRS, we have begun to ask some of the same questions of structural and functional neuroanatomy that we have been asking in animals.¹⁸ As well, we have made considerable progress in our understanding of human

mothering by combining insights gained by various fields including using novel statistical methods which make it easier to model the complex interactions among multiple sources of influences on mothering.

Key Research Questions

1. What are the hormonal, neural, genetic, and experiential bases of mothering behaviour in the animal model? What do we know about similar mechanisms in humans?
2. What are the social determinants of mothering behaviour in humans?
3. How does early life experience impact mothering behaviour?
4. What are the trans-generational effects of maternal behaviour in both animals and humans?
5. How does mothering behaviour mediate child outcomes in non-normative situations, such as in high-risk environments?

Recent Research Results

Around the time of birth in most mammals, changes to the hormonal milieu including fluctuating levels of estrogen,^{19,20} progesterone^{19,20}, prolactin²¹ and oxytocin²² trigger a cascade of neurological adaptations that result in typical maternal behaviour.²³ Numan, and colleagues,²⁴⁻²⁹ have demonstrated that the neurobiology of mothering in rodents relies heavily on projections from the medial preoptic area of the hypothalamus and bed nucleus of the stria terminalis, as well as fibres from surrounding sensory, limbic and cortical systems. Both hormones and sensory input act on these brain systems. Furthermore, studies have consistently shown that the neurotransmitter dopamine acts on various psychobiological systems to affect the expression of species typical maternal behaviour in both mothers who have given birth, and non-mothers who demonstrate maternal behaviours through repeated exposure to young.³⁰⁻³⁴ New mothers with minimal experience develop an attraction to, and recognition of, their own infants, their odours, cries and visual characteristics;³⁵ and hence, infants and their cues become rewarding to the mother.³⁶ Mothers also undergo a change in their emotional states, being more anxious and more often attentive to infants, and to threats to the infant;^{37,38} they show greater attentional flexibility and working memory. These psychological changes enhance maternal behaviour towards the infant. The quality of mothering is also affected by her environment, her stress,^{39,40} and her recent and early experiences.^{38,41} These environmental influences affect and interact with maternal genes.^{42,43} For instance, a mother's own experiences being mothered interact with her genes

resulting in epigenetic (environmental influences that turn genes on and off) modification of her expressed mothering behaviour.^{11,12,17,44-46} Enhancing the quality of mothering behaviour can help improve child outcome later in life. This is particularly true for children in adverse circumstances. Responsive parenting has been shown to help buffer children who are at risk of poor developmental outcomes because of genetic vulnerability,⁴⁷ low birth weight,⁴⁸ low socio-economic status, or cumulative environmental risk.⁴⁹⁻⁵¹

Research Gaps

Notable gaps in research on mothering behaviour include:

1. How does parental behaviour and the brain change across the lifespan of a child? What changes do we see from parenthood to grandparenthood?
2. Similar neurobiological systems that mediate other motivated behaviours (e.g., eating, sexual behaviour) are active in a new mother. Is there a state of maternal satiety similar to other motivated behaviours? Are there similar addictive properties?
3. From rodent models, the approach/avoidance theory of maternal behaviour suggests that neuroendocrine changes associated with parturition trigger a reduction in the aversive response of mothers towards pups while simultaneously provoking approach behaviours. Thus, the same neural substrates that lead a mother to respond maternally may be involved in aversive responses to infants. Can this theory inform our understanding of parenting in high-risk samples?

Implications for Parents, Services and Policy

Making conceptual associations between animal and human maternal behaviours is the principal challenge for scientists. Consequent testing of these associations is simpler yet equally valuable. What elements of an animal's maternal behaviour is unique to the animal, and what elements are part of a basic rule that can be transferable or applied to humans are important to determine. The integration of animal and human literature will lead to a better comprehension of maternal response and behaviour and will afford us more scientific understanding of its distinct and common expression in all species that engage in it.

References

1. Meaney MJ. Maternal care, gene expression, and the transmission of individual difference in stress reactivity across generations. *Annual Review of Neuroscience* 2001;24:1161-1192.
2. Ainsworth MS. Infant-mother attachment. *American Psychologist* 1979;34(10):932-937.

3. Barnard KE, Solchany JE. Mothering. In: Bornstein MH, ed. *Handbook of parenting: Vol.3. Being and becoming a parent. 2nd ed.* Mahwah, NJ: Erlbaum; 2002:3-25.
4. Davidov M, Grusec JE. Understanding the link of parental responsiveness to distress and warmth to child outcome. *Child Development* 2006;77(1):44-58.
5. Olazábal DE, Pereira M, Agrati D, Ferreira A, Fleming AS, González-Mariscal G, Lévy F, Lucion AB, Morrell JI, Numan M, Uriarte N. Flexibility and adaptation of the neural substrate that supports maternal behavior in mammals. *Neuroscience and Biobehavioral Reviews* 2013;37(8):1875-1892.
6. Olazábal DE, Pereira M, Agrati D, Ferreira A, Fleming AS, González-Mariscal G, Lévy F, Lucion AB, Morrell JI, Numan M, Uriarte N. New theoretical and experimental approaches on maternal motivation in mammals. *Neuroscience and Biobehavioral Reviews* 2013;37(8):1860-1874.
7. Fleming AS, Rosenblatt JS. Maternal behavior in the virgin and lactating rat. *Journal of Comparative and Physiological Psychology* 1974;86(5):957-972.
8. Barrett J, Fleming AS. Annual Research Review: All mothers are not created equal: neural and psychobiological perspectives on mothering and the importance of individual differences. *The Journal of Child Psychology and Psychiatry* 2011;52(4):368-397.
9. Fleming AS, Steiner M, Corter C. Cortisol, Hedonics, and Maternal Responsiveness in Human Mothers. *Hormones and Behavior* 1997;2(2):85-98.
10. Gonzalez A, Jenkins J, Steiner M, Fleming AS. Maternal Early Life Experiences and Parenting: The Mediating Role of Cortisol and Executive Function. *Journal of the American Academy of Child and Adolescent Psychiatry* 2012;51(7):673-682.
11. Mileva-Seitz V1, Steiner M, Atkinson L, Meaney MJ, Levitan R, Kennedy JL, Sokolowski MB, Fleming AS. Interaction between Oxytocin Genotypes and Early Experience Predicts Quality of Mothering and Postpartum Mood. *PLoS ONE* 2013;8(4):e61443.
12. Jonas W1, Mileva-Seitz V, Girard AW, Bisceglia R, Kennedy JL, Sokolowski M, Meaney MJ, Fleming AS, Steiner M; MAVAN Research Team. Genetic variation in oxytocin rs2740210 and early adversity associated with postpartum depression and breastfeeding duration. *Genes, Brain and Behavior* 2013;12(7):681-694.
13. Fleming AS, Klein E, Corter C. The Effects of a Social Support Group on Depression, Maternal Attitudes and Behavior in New Mothers. *Journal of Child Psychology and Psychiatry*, 1992;33(4):685-698.
14. Giardino J, Gonzalez A, Steiner M, Fleming AS. Effects of motherhood on physiological and subjective responses to infant cries in teenage mothers: A comparison with non-mothers and adult mothers. *Hormones and Behavior* 2008;53(1):149-158.
15. Meunier JC, Wade M, Jenkins JM. Mothers' differential parenting and children's behavioural outcomes: Exploring the moderating role of family and social context. *Infant and Child Development* 2012;21(1):107-133.
16. Chico E, Gonzalez A, Ali N, Steiner M, Fleming AS. Executive function and mothering: Challenges faced by teenage mothers. *Developmental Psychobiology* 2014;56(5):1027-1035. doi: 10.1002/dev.21185.
17. Mileva-Seitz V, Kennedy J, Atkinson L, Steiner M, Levitan R, Matthews SG, Meaney MJ, Sokolowski MB, Fleming AS. Serotonin transporter allelic variation in mothers predicts maternal sensitivity, behavior and attitudes toward 6-month-old infants. *Genes, Brain, and Behavior* 2011;10(3):325-333.
18. Barrett J, Wonch KE, Gonzalez A, Ali N, Steiner M, Hall GB, Fleming AS. Maternal affect and quality of parenting experiences are related to amygdala response to infant faces. *Social Neuroscience* 2012;7(3):252-268.
19. Liggins GC, Fairclough RJ, Grieves SA, Kendall JZ, Knox BS. The mechanism of initiation of parturition in the ewe. *Recent Progress in Hormones Research* 1973;29: 111-159.

20. Challis JRG, Lye SJ. Parturition. In: Knobil E, Neil J, eds. *The physiology of reproduction*. New York: Raven Press; 1994:985-1031.
21. Amenomori Y, Chen CL, Meites J. Serum Prolactin Levels in Rats During Different Reproductive States. *Endocrinology* 1970;86(3):506-510.
22. Higuchi T, Honda K, Fukuoka T, Negro H, Wakabayashi K. Release of oxytocin during suckling and parturition in the rat. *Journal of Endocrinology* 1985;105:339-346.
23. Numan M, Fleming AS, Levy F. Maternal behavior. In: Neill JD, ed. *Knobil and Neill's Physiology of Reproduction*. Oxford: Academic Press; 2006:1921-1994.
24. Numan M. Hypothalamic Neural Circuits Regulating Maternal Responsiveness Toward Infants. *Behavioral Cognitive Neuroscience Reviews* 2006;5(4):163-190.
25. Fleming AS, Vaccarino F, Luebke C. Amygdaloid inhibition of maternal behavior in the nulliparous female rat. *Physiology and Behavior* 1980;25(5):731-743.
26. Fleming AS, Walsh C. Neuropsychology of maternal behavior in the rat: c-fos expression during mother-litter interactions. *Psychoneuroendocrinology* 1994;19(5-7):429-443.
27. Fleming AS, Suh EJ, Korsmit M, Rusak B. Activation of Fos-like immunoreactivity in the medial preoptic area and limbic structures of maternal and social interactions in rats. *Behavioural Neuroscience* 1994;108(4):724-734.
28. Sheehan TP, Cirrito J, Numan MJ, Numan M. Using c-Fos immunocytochemistry to identify forebrain regions that may inhibit maternal behavior in rats. *Behavioural Neuroscience* 2000;114(2):337-352.
29. Sheehan T, Paul M, Amaral E, Numan MJ, Numan M. Evidence that the medial amygdala projects to the anterior/ventromedial hypothalamic nuclei to inhibit maternal behavior in rats. *Neuroscience* 2001;106(2):341-356.
30. Afonso VM, King SJ, Novakov M, Burton CL, Fleming AS. Accumbal dopamine function in postpartum rats that were raised without their mothers. *Hormones and Behavior* 2011;60(5):632-643.
31. Afonso VM, King SJ, Chatterjee D, Fleming AS. Hormones that increase maternal responsiveness affect accumbal dopaminergic responses to pup- and food-stimuli in the female rat. *Hormones and Behavior* 2009;56(1):11-23.
32. Champagne FA, Chretien P, Stevenson CW, Zhang TY, Gratton A, Meaney MJ. Variations in nucleus accumbens dopamine associated with individual differences in maternal behavior in the rat. *Journal of Neuroscience* 2004;24(17):4113-4123.
33. Hansen S, Bergvall AH, Nyiredi S. Interaction with pups enhances dopamine release in the ventral striatum of maternal rats: A microdialysis study. *Pharmacology, Biochemistry, and Behavior* 1993;43(4):673-676.
34. Numan M, Insel TR. *The Neurobiology of Parental Behaviour*. Springer-Verlag: New York; 2003.
35. Fleming AS, Grusec J, Daley D, eds. *Parenting, Science, and Practice. Special Issue to Parenting Science and Practice entitled The Arc of Parenting: From Epigenomes to Ethics*. 2012; vols 3-4.
36. Strathearn L, Li J, Fonagy P, Montague PR. What's in a Smile? Maternal Brain Responses to Infant Facial Cues. *Pediatrics* 2008;122(1):40-51.
37. Fleming AS, Ruble DN, Flett GL, Shaul DL. Postpartum adjustment in first-time mothers: Relations between mood, maternal attitudes, and mother-infant interactions. *Developmental Psychology* 1988;24(1):71-81.
38. Agrati D, Brown D, Jonas W, Meaney M, Atkinson L, Steiner M, Fleming AS. Maternal anxiety from pregnancy to 2 years postpartum: transactional patterns of maternal early adversity and child temperament. *Archives of Women's Mental Health*, epub ahead of print. 2015.
39. Crnic KA, Greenberg MT, Robinson NM, Ragozin AS. Maternal stress and social support: Effects on the mother-infant relationship from birth to eighteen months. *American Journal of Orthopsychiatry* 1984;54(2):224-235.

40. Crnic KA, Gaze C, Hoffman C. Cumulative parenting stress across the preschool period: relations to maternal parenting and child behaviour at age 5. *Infant and Child Development* 2005;14(2):117-132.
41. Madigan S, Wade M, Lamondon A, Jenkins J. Maternal abuse history, postpartum depression, and parenting: links with preschoolers' internalizing problems. *Infant Mental Health* 2015;36(2):146-155.
42. Bouvette-Turcot AA, Fleming AS, Wazana A, Sokolowski MB, Gaudreau H, Gonzalez A, Deslauriers J, Kennedy JL, Steiner M, Meaney MJ; MAVAN Research Team. Maternal childhood adversity and child temperament: An association moderated by child 5-HTTLPR genotype. *Genes, Brain, and Behavior*, epub ahead of print. 2015.
43. Jonas W, Mileva-Seitz V, Girard AW, Bisceglia R, Kennedy JL, Sokolowski M, Meaney MJ, Fleming AS, Steiner M; MAVAN Research Team. Genetic variation in oxytocin rs2740210 and early adversity associated with postpartum depression and breastfeeding duration. *Genes, Brain, and Behavior* 2013;12(7):681-694.
44. Champagne FA, Curley JP. Epigenetic mechanisms mediating the long-term effects of maternal care on development. *Neuroscience and Biobehavioral Reviews* 2009;33(4):593-600.
45. Mileva-Seitz V, Fleming AS, Meaney MJ, Mastroianni A, Sinnwell JP, Steiner M, Atkinson L, Levitan RD, Matthews SG, Kennedy JL, Sokolowski MB. Dopamine receptors D1 and D2 are related to observed maternal behavior. *Genes, Brain, and Behavior* 2012;11(6):684-694.
46. Weaver IC, Cervoni N, Champagne FA, D'Alessio AC, Sharma S, Seckl JR, Dymov S, Szyf M, Meaney MJ. Epigenetic programming by maternal behavior. *Nature Neuroscience* 2004;7(8):847-854.
47. Caspi A, McClay J, Moffitt TE, Mill J, Martin J, Craig IW, Taylor A, Poulton R. Role of genotype in the cycle of violence in maltreated children. *Science* 2002;297(5582):851-854.
48. Landry SH, Smith KE, Swank PR. Responsive parenting: establishing early foundations for social, communication, and independent problem-solving skills. *Developmental Psychology* 2006;42(4):627-642.
49. Evans GW, Kim P. Childhood poverty and health cumulative risk exposure and stress dysregulation. *Psychological Science* 2007;18(11):953-957.
50. Evans GW, et al., Cumulative risk, maternal responsiveness, and allostatic load among young adolescents. *Developmental Psychology* 2007;43(2):341-351.
51. Werner E, Smith R. *Vulnerable but invincible: A longitudinal study of resilient youth and children*. New York, NY: McGraw-Hill; 1982.

Parent Support Programs and Outcomes for Children

Barbara Dillon Goodson, PhD

Abt Associates Inc., USA

December 2014, 3e éd.

Introduction

Programs to support parents in their task of raising children have been in place for more than a century, with a variety of goals for families and types of services. Today, tens of thousands of such programs exist, most of them small, grass-roots, community-based programs that serve only a small number of families at any one time. Parent support programs do not share a uniform intervention, but they have a common goal – to improve the lives of children – and a shared strategy – to affect children by creating changes in parents’ attitudes, knowledge and/or behaviour. While the majority of parent support programs serve all families in a community, in the last decade or so, parent support interventions have been increasingly implemented with families whose children may be especially vulnerable to poor developmental outcomes because of poverty or a variety of other family risk factors. Parent support programs for at-risk families have focused on helping families reduce and cope with the stresses that threaten children’s well-being.

Subject

There is strong consensus that parents matter in how their children develop and function. Data from twin studies, as well as from hundreds of correlational studies, have linked multiple dimensions of parenting behaviour to different indicators of child outcomes.^{1,2} Additional research has demonstrated the relationship between parenting practices and family socio-economic status. This body of research on the pivotal role of parenting behaviour in children’s development has constituted the theoretical underpinning for parent support interventions. Parent support programs seek to influence children’s outcomes by motivating changes in parents through a variety of social and practical supports, including case management that links families with services, education on child development and parenting practices, and social support through relationships with service staff and with other parents. Some programs for low-income

families are also concerned with improving the economic self-sufficiency of families and providing support for parents in obtaining additional education, finding jobs or delaying subsequent pregnancies.

Problems

There is abundant research linking parental behaviour to child health and development. Brooks-Gunn recently summarized the research as showing that language stimulation and learning materials in the home are the parenting practices most strongly linked to school readiness, vocabulary and early school achievement, while parent discipline strategies and nurturance are most strongly linked to social and emotional outcomes such as behaviour and impulse control and attention.³ That is, discipline practices that do not help children develop their own internalized behaviour standards can also adversely affect children's social and emotional functioning – their abilities to develop sustained social relationships and to take account of the needs and feeling of others, to control and direct their own impulses, and to focus their attention to plan and complete tasks successfully. There is also evidence that parent support for and involvement in their children's school is related to children's educational attainment by promoting school achievement.^{4,5}

At the same time, there is disagreement in the field about the strength of the evidence on the effectiveness of parent support programs for child outcomes, primarily because of the scarcity of studies with strong internal validity, i.e. reduced bias of different kinds. The question remains: whether it is possible to change parent knowledge, attitudes and/or behaviour through parent programs and, if so, whether these changes in parents translate into improved outcomes for children.

Research Context

The evidence on the effectiveness of parent support programs at producing better outcomes for children is relatively limited, primarily because of the quality rather than the quantity of evaluation studies. That is, only a few studies have employed strong designs, either experiments in which families are randomly assigned to receive parent support services or to receive no systematic services, or strong quasi-experimental designs with well-constructed comparison groups. Also, the evidence is strongest in the domain of children's cognitive school readiness. This may be because there are many more standardized and normed measures available in the cognitive domain, or it may be related to the strong interest in children's cognitive readiness for

school and their subsequent academic achievement. Evidence of the effectiveness of parent support programs on children's cognitive and social development is far from conclusive. The absence of compelling research evidence on program impacts on children has left the door open for differing interpretations of the evidence and differing conclusions about the effectiveness of family support programs.

Key Research Questions

The causal pathway from parent support programs to child outcomes has a number of links, starting with strongly implemented programs and adequate levels of participation by parents in the program services. Beyond these necessary but insufficient steps, it is assumed that outcomes for children are mediated by changes that the programs create in parents. Therefore, the first question on program impacts is whether parent support programs have been effective at changing parents' attitudes or behaviours. If these changes can be shown, the subsequent research question is whether these changes in parents lead to improved outcomes for children in the cognitive domain or in the child's social and emotional development. A third research question, especially difficult to answer but of strong interest for practitioners, is what types of programs are most effective. That is, do the programs that are more effective have elements in common, such as types of services, types of staff, methods of service delivery, etc.? The most complex research question addresses what works for whom: Are there types of parent support that are more effective for different types of children and families?

Recent Research Results

A comprehensive meta-analysis of the effects of parent support programs summarizes child outcome data for parents and children from evaluations of more than 200 programs.⁶ The average effects on parents varied by the outcome domain. The strongest effects were on parenting behaviour and parenting attitudes/knowledge, where the average effect size was .24 (a quarter of a standard deviation on the scale on which the outcome is measured). Program effects on family functioning and parent mental health were smaller, with average effect sizes below .20. The effect sizes were strongly influenced by a handful of programs with very large effects. Across the program evaluations, the effect sizes for the majority of programs clustered around 0-.15 of a standard deviation (s.d.). The larger average effect was produced by between 20 and 25% of the programs that had effect sizes larger than .5 (which is considered to represent a moderate-to-large effect). The parent support programs had effects for children as well. The programs looked

at a wide variety of outcomes in both the cognitive and social-emotional domains. In the domain of social and emotional development, the average effect was .22; for cognitive development, it was .29. The average effect was largest for preschool children's programs (average = .39 s.d.). The majority of parent support programs had very small effect sizes for child outcomes, clustered around 0-.15 of a standard deviation.

The fact that a small percentage of parent support programs had significant effects while most did not begs the question of whether these effective programs had elements in common. The meta-analysis suggests that programs with stronger effects on children's social and emotional development share three characteristics: (a) the program targets children with a specific need that has been identified by the parents, such as a behavioural or conduct disorder or developmental delay (also corroborated by Brooks-Gunn^a; (b) the program uses professional rather than paraprofessional staff; or (c) the program provides opportunities for parents to meet together and provide peer support as part of the service delivery approach. In general, case management, i.e. helping parents identify and access needed services, was not an effective strategy. One possible reason for this absence of effects is that the relevant services may not be available, for example, mental-health services or better housing.

This meta-analysis also showed that programs that combine parent support services and early childhood education also have larger-than-average effects on both parents and children. This finding from the meta-analysis has been corroborated by the evidence that many of the early childhood education interventions that have been shown to have long-term effects provide early childhood education and family support services.^{7,8,9}

The enhanced effects of parent support programs that combine work with parents and direct educational services for children raise the question of which component is responsible for the child effects – the parent support or the early childhood education. Analyses of findings from an earlier intensive child development program for low birth weight children and their parents (the Infant Health and Development Program) suggest that the cognitive effects for the children were mediated through the effects on parents, and the effects on parents accounted for between 20 and 50% of the child effects.¹⁰ A recent analysis of the Chicago Child Parent Centers, an early education program with a parent support component, examined the factors responsible for the program's significant long-term effects on increasing rates of school completion and decreasing rates of juvenile arrest.¹¹ The authors conducted analyses to test alternative hypotheses about the pathways from the short-term significant effects on children's educational achievement at the end of preschool to these long-term effects, including (a) that the cognitive and language stimulation children experienced in the centres led to a sustained cognitive advantage that

produced the long-term effects on the students' behaviour; or (b) that the enhanced parenting practices, attitudes, expectations and involvement in children's education that occurred early in the program led to sustained changes in the home environments that made them more supportive of school achievement and behavioural norms, which in turn produced the long-term effects on the students' behaviour. Structural equation modelling showed that both the cognitive advantage gained by the children and the family support experiences were linked to long-term program effects on children. Family factors (involvement in schools and reduced abuse and neglect) were shown to be significant mediators of the effect of the preschool program on high school completion, while only parent involvement in schools was a mediator of juvenile arrest rates. Also, while both the cognitive advantage and family support explained impacts on early child outcomes, such as school achievement, family support explained more of the effects on juvenile delinquency and about equally explained the effects on school completion.

Conclusions

Debate continues about the effectiveness of parent support interventions on outcomes for children. Program evaluations have shown the difficulty of producing sustained and comprehensive changes in parents. The subsequent link between changes in parents and positive consequences for their children's development has been even harder to prove. The field has been plagued by research that has low internal validity, i.e. is susceptible to bias of different kinds. The evidence is strongest on the role of parent support services in supporting children's cognitive development, especially for preschool children. The data are particularly strong for programs that combine a parent support intervention with direct educational services for children, and there is some evidence that both components contribute to improved outcomes for children. There is less evidence in the areas of social and emotional development; however, recent longitudinal analyses from a program with both early childhood and parent support services have provided new evidence linking parent support and long-term social outcomes.^{12,13}

Implications

The vast majority of parent support programs are designed and implemented without attention to research or evaluation. This means that we continue to provide parent support interventions without increasing our understanding of whether and how our work with parents can lead to effects for children. This is particularly true for the domain of children's social and emotional functioning, both because of inadequate measures and because of the current policy focus on cognitive outcomes for children that link to specific academic achievements, such as learning to

read. The critical role of parenting in the lives of children provides a strong incentive to policy-makers and researchers to design programs that take advantage of these intimate and powerful familiar processes. Until we more clearly understand whether and how our interventions with parents affect children, the policy relevance of these programs will remain in question.

References

1. Brooks-Gunn J, Markman LB. The contribution of parenting to ethnic and racial gaps in school readiness. *The Future of Children* 2005;15(1):139-168.
2. Collins WA, Maccoby EE, Steinberg L, Hetherington EM, Bornstein MH. Contemporary research on parenting: The case for nature and nurture. *American Psychologist* 2000;55(2):218-232.
3. Kreider H. A conversation with Jeanne Brooks-Gunn. *The Evaluation Exchange* Winter 2004/2005;10(4):12-13.
4. Barnett WS, Young JW, Schweinhart LJ. How preschool education influences long-term cognitive development and school success: A causal model. In: Barnett WS, Boocock SS, eds. *Early care and education for children in poverty: Promises, programs, and long-term results*. Albany, NY: State University of New York Press; 1998:167-184.
5. Reynolds AJ, Mavrogenes NA, Bezruczko N, Hagemann M. Cognitive and family-support mediators of preschool effectiveness: A confirmatory analysis. *Child Development* 1996;67(3):1119-1140.
6. Layzer JI, Goodson BD, Bernstein L, Price C. *National evaluation of family support programs. Volume A: The meta-analysis. Final report*. Cambridge, Mass: Abt Associates Inc.; 2001.
7. Yoshikawa H. Long-term effects of early childhood programs on social outcomes and delinquency. *The Future of Children* 1995;5(3):51-75.
8. Zigler E, Taussig C, Black K. Early childhood intervention: A promising preventative for juvenile delinquency. *American Psychologist* 1992;47(8):997-1006.
9. Seitz V. Intervention programs for impoverished children: A comparison of educational and family support models. In: Vasta R, ed. *Annals of child development: A research annual, vol. 7*. Philadelphia, Pa: Jessica Kingsley Publishers; 1990:73-103.
10. Brooks-Gunn JC, McCarton CM, Casey PH, McCormick MC, Bauer CR, Bernbaum JC, Tyson J, Swanson M, Bennett FC, Scott DT, Tonascia J, Meinert CL. Early intervention in low-birth-weight premature infants: Results through age 5 years from the Infant Health and Development Program. *JAMA - Journal of the American Medical Association* 1994;262(16):1257-1262.
11. Reynolds AJ, Ou SR, Topitzes JW. Paths of effects of early childhood intervention on educational attainment and delinquency: A confirmatory analysis of the Chicago Child-Parent Centers. *Child Development* 2004;75(5):1299-1328.
12. Campbell FA, Pungello EP, Miller-Johnson S, Burchinal M, Ramey CT. The Development of Cognitive and Academic Abilities: Growth Curves from an Early Childhood Educational Experiment. *Developmental Psychology* 2001;37:231-242.
13. Campbell FA, Ramey CT, Pungello EP, Sparling J, Miller-Johnson S. Early Childhood Education: Young Adult Outcomes from the Abecedarian Project. *Applied Developmental Science* 2002;6:42-57.

Note:

^a It is important to note that the meta-analysis of evaluations of parent support programs, like other meta-analyses, showed that the size of the impacts of any of the parent support programs is strongly related to the type of evaluation design. The largest average effects were reported in pre-post studies; the next largest in quasi-experimental studies; and the smallest effects were reported for randomized studies.

Community-Based Parent Support Programs

Carol M. Trivette, PhD, Carl J. Dunst, PhD

Orelena Hawks Puckett Institute, USA

December 2014, 3e éd.

Introduction

Community-based parent support programs differ from traditional human services parenting programs in both form and function¹ For the purposes of this review, parent support programs are defined as community-based initiatives designed to promote the flow of resources and supports to parents that strengthen functioning and enhance the growth and development of young children.

The primary goal of parent support programs is to provide support and information in ways that help parents become more capable and competent.^{2,3} Research now indicates that to reach this goal, it is necessary that staff use practices that are family-centered as opposed to professionally-centered, and capacity-building as opposed to dependency forming.^{4,5,6,7} The key characteristics of family-centered practices include: treating families with dignity and respect; providing individual, flexible and responsive support; sharing information so families can make informed decisions; ensuring family choice regarding intervention options; and providing the necessary resources and supports for parents to care for their children in ways that produce optimal parent and child outcomes.^{8,9,10,11}

Home visiting programs and community-based parenting support programs are two different approaches to enhancing parents' abilities to support their children's development.¹² This review examines evidence concerning the effectiveness of community-based parent support programs. Parent support programs that use home visiting for delivering parenting services are described elsewhere.^{2,13}

Subject

Parent support programs aim to support and strengthen existing parenting abilities and promote the development of new competencies so that parents have the knowledge and skills needed to carry out child-rearing responsibilities and provide their children with experiences and

opportunities that promote child learning and development.¹⁴ Parenting support programs typically include the following features: universal access for families, early support to families, and family involvement at all levels of program operation¹⁵ Parenting programs often encompass a variety of parenting activities, including, but not limited to, parent and child play groups, parent information classes and support groups, parenting materials, and individualized parent supports provided in response to particular child-rearing concerns or specific parenting questions. Providing or helping parents gain access to other types of supports and resources, such as medical or child care resources, is also an important feature of these programs.^{16,3}

Community-based parent support programs are based on the belief that when parents receive parenting support as well as other supports and resources, they are more likely to feel better about themselves and their parenting abilities, and in turn interact with their children in responsive and supportive ways enhancing the development of their children.³ Bronfenbrenner,¹⁶ Cochran,¹⁷ and others^{18,19} have noted that parenting knowledge and skills are learned and strengthened by the kinds of help and assistance provided by informal and formal social support network members. The extent to which help and assistance enhances or compromises parenting competence and confidence depends to a large degree on the ways in which help is offered and provided.^{20,3,21,6} Consequently, efforts to provide supports and resources to parents need to be done in ways that enhance rather than diminish parenting capacity. Enhancing parenting competence and confidence is one major goal of capacity-building help-giving practices.

Capacity Building Help-Giving Practices.

Community-based parent support program staff use capacity-building helpgiving practices to provide supports to parents. Capacity-building helpgiving practitioners help family members acquire the skills to obtain resources, supports, and services. Capacity-building practices support and enhance parents' competence and confidence to promote the development of their young children, including their social and emotional development.^{22,5}

There are two dimensions of capacity-building helpgiving practices: relational and participatory helpgiving.^{23,24,25,6} Relational practices include behaviours typically associated with effective helpgiving (compassion, active listening, etc.) and positive staff attributions about program participant capabilities. Participatory helpgiving practices include behaviours that involve program participant choice and decision-making, and which meaningfully involve participants in actively procuring or obtaining desired resources or supports.

Problem

Enhancing and strengthening parenting capacity and the social and emotional development of young children are important outcomes of community-based parenting programs. The relationship between what program staff do and how parents enhance the social and emotional development of their young children is often implicitly rather than explicitly stated by parent support program builders. This paper includes information about the empirical evidence concerning the relationship between capacity building help-giving practices, parenting competence and confidence, and the behaviour and development of young children, including their social and emotional development.

Research Context

By design, most parent support programs offer individualized, multifaceted “interventions” to parents in response to their changing concerns and needs. Although most studies were not designed to *disentangle* and *unpack* the effects of these interventions, it is possible to do so by paying careful attention to the characteristics of helpgiver practices to identify the most important characteristics of parent support program practices.

Key Research Questions

The research questions to be answered are the following:

1. Does providing parent support in a family-centered capacity-building manner increase parents’ sense of confidence and competence in their parenting ability?
2. Do parent support programs enhance parents’ abilities to interact with their young children in ways that lead to the children’s positive social and emotional development?

Recent Research

A number of research reviews and syntheses have been published that examined the relationship between family-centered helpgiving practices and parent, family, and child outcomes.^{26,22,27,5,28,29,30,31}

The studies in these reviews and syntheses used different measures of family-centered capacity-building helpgiving, many of which assessed either or both relational and participatory helpgiving practices. The parent, child, and family outcomes in the studies in these reviews and syntheses included participant satisfaction with the helpgiver and his or her program, program

helpfulness, social support and resources, parent and family functioning, parenting capabilities, and child behaviour and development. Several of these syntheses included measures of self-efficacy beliefs, where the investigators examined the extent to which the relationship between helpgiving practices and the study outcomes were mediated by belief appraisals.^{22,5}

Capacity-building help-giving practices

Findings in the majority of research syntheses indicate capacity-building helpgiving practices are related to a host of positive parent, family, parent—child, and child outcomes.^{22,27,5} Both relational and participatory helpgiving practices were found to be related to participant satisfaction with program and practitioner supports, program resources, informal and formal supports, parent and family well-being, family functioning, and child behaviour and development. The nature of the relationship between helpgiving practices and both parenting capabilities and child social-emotional behaviour help elucidate how parent support programs influence these outcomes.

Parenting confidence, competence and enjoyment

Several research syntheses examined the ways capacity-building helpgiving practices were related to different aspects of parenting behaviour.^{26,22,27,5} The measures of parenting behaviour included parenting competence, parenting confidence, and parenting enjoyment. Both the direct and indirect effects of helpgiving practices on parenting behaviour were examined, where the indirect effects were determined using self-efficacy beliefs as a mediator. Results showed that helpgiving practices had both direct and indirect effects on parenting confidence, competence, and enjoyment, where the strength of the relationship was strongest for the indirect effects mediated by self-efficacy beliefs. Additionally, participatory (compared to relational) helpgiving practices had stronger direct and indirect effects on parenting behaviours.

Social-emotional behaviour and development

Findings in the same research syntheses also demonstrate a relationship between parent support program practices and the social and emotional development of young children.^{26,22,27,5,28,29} The measures of child behaviour included enhanced positive child social-emotional behaviour and attenuated negative child social-emotional behaviour. Both relational and participatory helpgiving practices had both direct and indirect effects on the different child behaviour outcomes. The indirect influences of helpgiving practices on child social-emotional behaviour was mediated by parents' self-efficacy beliefs.

Conclusions

There is now a large and convincing body of evidence indicating that community-based parent support programs operated in a family-centered manner increase parents' sense of parenting confidence and competence. Participatory help-giving practices that actively involve parents in deciding what knowledge is important to them, and how they want to acquire the information they need, have the greatest positive effect on parents' sense of competence and confidence.^{22,5} Available research evidence also indicated that the social and emotional development of young children is influenced by the ways in which program staff provided parenting support.^{24,32}

Implications

Parent support programs can have important positive effects on both parenting behaviours and the social and emotional development of young children. One of the key features of these programs is not only what is offered, but how supports are provided. Capacity-building helpgiving practices that form the basis of the interactions between staff and families ensure the enhancement of parents' capacities which in turn gives them the competence and confidence necessary to interact with and promote the social and emotional development of their children.

References

1. Weissbourd B. Family resource and support programs: Changes and challenges in human services. *Prevention in Human Services* 1990;9(1):69-85.
2. Comer EW, Fraser MW. Evaluation of six family-support programs: Are they effective? *Families in Society* 1998;79(2):134-148.
3. Dunst CJ. *Key characteristics and features of community-based family support programs*. Chicago, Ill: Family Resource Coalition, Best Practices Project; 1995.
4. Allen RI, Petr CG. Toward developing standards and measurements for family-centered practice in family support programs. In: Singer GHS, Power LE, Olson AL, eds. *Family, community, and disability: Redefining family support. Innovations in public-private partnerships*. Baltimore, MD : Paul H. Brookes Pub. Co; 1996:57-85.
5. Dunst CJ, Trivette CM, Hamby DW. *Research synthesis and meta-analysis of studies of family-centered practices*. Asheville, NC: Winterberry Press; 2008. Winterberry Monograph Series.
6. Trivette CM, Dunst CJ. *Capacity-building family-centered helpgiving practices* Asheville, NC: Winterberry Press; 2007:1-10 . Winterberry Research Reports.
7. Wade CM, Milton RL, Matthews JM. Service delivery to parents with an intellectual disability: Family-centered or professionally centered? *Journal of Applied Research in Intellectual Disabilities* 2007;20(2):87-98.
8. Dunst CJ. Conceptual and empirical foundations of family-centered practice. In: Illback RJ, Cobb CT, Joseph H Jr, eds. *Integrated services for children and families: Opportunities for psychological practice*. Washington, DC: American Psychological Association; 1997:75-91.
9. Dunst CJ. Family-centered practices: Birth through high school. *Journal of Special Education* 2002;36(3):139-147.

10. King G, King S, Rosenbaum P, Goffin R. Family-centered caregiving and well-being of parents of children with disabilities: Linking process with outcome. *Journal of Pediatric Psychology* 1999;24(1):41-53.
11. Shelton TL, Smith Stepanek J. *Family-centered care for children needing specialized health and developmental services*. 3rd ed. Bethesda, MD: Association for the Care of Children's Health; 1994.
12. Family Resource Coalition. *Guidelines for family support practice*. Chicago, Ill: Family Resource Coalition, Best Practices Project; 1996.
13. Zercher C, Spiker D. Home visiting programs and their impact on young children. In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2004:1-8. Available at: <http://www.child-encyclopedia.com/Pages/PDF/Zercher-SpikerANGxp.pdf>. Accessed April 20, 2009.
14. Kagan SL, Weissbourd B, eds. *Putting families first: America's family support movement and the challenge of change*. San Francisco, CA: Jossey-Bass; 1994.
15. Canadian Association of Family Resource Programs. *Parenting and family supports: Moving beyond the rhetoric together*. Ottawa, Ontario: Canadian Association of Family Resource Programs; 2001. Available at: <http://www2.frp.ca/PDFDocuments/positionpaper2001.PDF>. Accessed April 20, 2009.
16. Bronfenbrenner U. *The ecology of human development: experiments by nature and design*. Cambridge, MA: Harvard University Press; 1979.
17. Cochran M. Parenting and personal social networks. In: Luster T, Okagaki L, eds. *Parenting: An ecological perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates; 1993:149-178.
18. Bornstein MH, ed. *Status and social conditions of parenting*. Hillsdale, NJ: Lawrence Erlbaum Associates; 1995. *Handbook of parenting*; vol 3.
19. Shonkoff JP, Phillips DA, eds. *From neurons to neighborhoods: the science of early child development*. Washington, DC: National Academy Press; 2000.
20. Caplan PJ. *The new don't blame mother: mending the mother-daughter relationship*. New York, NY: Routledge; 2000.
21. Hewlett SA, West C. *The war against parents: what we can do for America's beleaguered moms and dads*. Boston, MA: Houghton Mifflin; 1998.
22. Dunst CJ, Trivette CM, Hamby DW. *Family support program quality and parent, family and child benefits*. Asheville, NC: Winterberry Press; 2006. Winterberry Monograph Series
23. Dunst CJ, Trivette CM. Empowerment, effective helpgiving practices and family-centered care. *Pediatric Nursing* 1996;22(4):334-337, 343.
24. Dunst CJ, Trivette CM. Measuring and evaluating family support program quality. Asheville, NC: Winterberry Press; 2005. Winterberry Monograph Series.
25. Trivette CM, Dunst CJ. Family-centered helpgiving practices. Paper presented at: 14th Annual Division for Early Childhood International Conference on Children with Special Needs. December, 1998: Chicago, IL.
26. Dempsey I, Keen D. A review of processes and outcomes in family-centered services for children with a disability. *Topics in Early Childhood Special Education* 2008;28(1):42-52.
27. Dunst CJ, Trivette CM, Hamby DW. Meta-analysis of family-centered helpgiving practices research. *Mental Retardation and Developmental Disabilities Research Reviews* 2007;13(4):370-378.
28. King S, Teplicky R, King G, Rosenbaum P. Family-centered service for children with cerebral palsy and their families: A review of the literature. *Seminars in Pediatric Neurology* 2004;11(1):78-86.

29. O'Brien M, Dale D. Family-centered services in the neonatal intensive care unit: A review of research. *Journal of Early Intervention* 1994;18(1):78-90.
30. Rosenbaum P, King S, Law M, King G, Evans J. Family-centred service: A conceptual framework and research review. *Physical and Occupational Therapy in Pediatrics* 1998;18(1):1-20.
31. Shields L, Pratt J, Davis LM, Hunter J. Family-centred care for children in hospital. *Cochrane Database of Systematic Reviews* 2007;1:4811.
32. Layzer JI, Goodson BD, Bernstein L, Price C. *National evaluation of family support programs: Final report*. Cambridge, MA: Abt Associates; 2001. *The Meta-Analysis*; vol A

Parent Support Programs and Early Childhood Development: Comments on Goodson, and Trivette and Dunst

Jane Drummond, PhD

Faculty of Nursing, University of Alberta, Canada

December 2014, 3e éd.

Introduction

Canadian policy-makers have been encouraged to subscribe to the conviction that early child development is a determinant of national health and wealth.^{1,2} In a study using data from the National Longitudinal Survey of Children and Youth (NLSCY), it was determined that about one-third of Canadian parents use optimal parenting approaches³ and that over time, parental responsiveness to their children declines. In Canada, parenting style is heterogeneous across socio-economic status (SES). But low SES and problematic parenting are related to behavioural challenges in children. The two papers commented on here originate from and are developed in research programs that focus on child and family development. Canadian researchers who subscribe to the population health approach would like to see these ideas developed and rigorously implemented within health and social programs that are then integrated across sectors.⁴

Trivette and Dunst have dedicated their research careers to understanding social support of young families, and as a result have developed the tradition of family-centeredness. It is no surprise, therefore, to find that the research presented in their review is focused on understanding particular characteristics of family-centered help-giving practices and the links to social emotional development in children. The link between *what* is done and *how* it is done is proposed as important. Two key family-centered help-giving practices are isolated and examined.^{5,6} Relational practices are said to include “behaviours” associated with compassion and active listening, as well as positive staff attributions about participant capabilities that build mutual trust and collaboration. Participatory help-giving practices include “behaviours” that involve program participant choice and decision-making around procuring desired resources and supports.

Goodson undertakes to inform the reader about the contribution of parent support programs to a causal pathway from parent attitudes/behaviours to child outcomes. She makes it clear that the review is carried out in a research context in which the quality but not the quantity of evaluation studies is limited, measurement is typically focused on children's cognitive gains (not socio-emotional gains), and assumptions are made about the rigour of the program implementation and the adequacy of family retention in the programs.

Research and Conclusions

In the paper by Trivette and Dunst, parents' capacity to promote child social-emotional development is operationalized as confidence/competence. They report four major findings. First, parent support programs improve parental competence/confidence and parental beliefs that child-initiated interactions are most important in parent-child interactions.^{7,8} Second, although general parent support programs support social-emotional development of children, parent support that is directed at parental emotional and educational/economic development has an enhanced impact on child social-emotional development.⁹ Third, participatory help-giving practices contribute the most to parents' judgment of their children's emotional competence.⁷ Fourth, group approaches to parental support have a more powerful effect on child social-emotional competence than home-visiting approaches.⁹

Goodson refers to the same meta-analysis used by Trivette and Dunst in their paper⁹ and also to the longitudinal work of Reynolds and colleagues.^{10,11} Four findings are reported. First, parent support programs have less of an effect on social-emotional competence than on cognitive gains. Second, programs with stronger effects on social-emotional competence have three characteristics: children with specific needs are targeted, professionals deliver the service, and parents meet together to provide peer support. Third, programs that provide both direct early childhood education and parent support services have larger-than-average effects. Fourth, family support has a stronger effect than cognitive gain on juvenile delinquency (social-emotional competence), while their effect is about equal on high school completion (cognitive competence).

I am familiar with the literature on family support, family-centered practice, and parent support and have no argument with the positions taken by the authors of these two papers. My colleagues and I have focused our research program on parent support of vulnerable groups and have found, through the use of randomized control trials, that systematic interventions directed at parenting behaviours improve parental contingency in low-income parents and in adolescent

mothers.^{12,13} Similarly, we have found that systematic intervention on family problem-solving behaviour, what Trivette and Dunst call participatory help-giving practice, also improves contingency of parent-child interactions.¹⁴

In my opinion, more research is required on those areas of assumption made by Goodson, i.e. on the rigour of the parent support program implementation and on the adequacy of family retention in those programs. Just as there is a gap between controlled interventions and clinical applications in child and adolescent psychotherapy,^{15,16} the transition from efficacious parent support approaches to effective community program practice needs to be carefully implemented and tracked.¹⁷

Implications for Services, Development and Policy

Trivette and Dunst imply that family-centered help-giving practices must form the basis of interactions between parent support-providers and families. Goodson, on the other hand, is keen to have researchers, service-providers and policy-makers attend to the need for rigorous implementation and evaluation study of parent support programs that target socio-emotional development in children. These implications are self-evident and fall naturally from a review of the literature in the latter case and from the career focus of the researchers in the former case.

A challenge faced by Canadian health and social-service providers is to promote parenting,³ but in a proactive and cost-effective manner. A consistent negative association exists between family vulnerability due to socio-economic and related factors and engagement/retention rate in health, social, educational, leisure and cultural activities.^{18,19,20,21} Barriers include service fragmentation; narrowness of mandate; power differential created by provider expertise; and difficulty in access because of location, language and hours of availability. The combination of family and service barriers results in reduced opportunities for effective access to preventive parenting programs and in increased use of secondary-level services (e.g. emergency medical services, child emergency social services, police involvement) by vulnerable families, with the obvious increase in costs.

Because the issues facing vulnerable families are rooted in an array of social, economic and political conditions that extend beyond the control of any one service sector, government and community systems must collaborate to coordinate programs. Collaborations are necessary when organizations share a common purpose, and when that common purpose addresses a meta-level problem,²² such as parenting in vulnerable families. Collaboration occurs when a group of

autonomous stakeholders, sharing a problem domain, interact using shared rules, norms and structures to address issues related to that domain.²³ Inherent in collaboration is the notion that the outcomes achieved are more effective, efficient and/or sustainable than what would have been achieved if organizations were working alone.^{24,25,26,27,28} Researchers^{28,29,30} have found that collaboration and integration of services for vulnerable populations are more effective, efficient and less costly than narrowly focused initiatives. Concerted efforts are required to create collaboration across sectors with the goal of improving parent support to Canadian families.

References

1. Keating DP, Hertzman C, eds. *Developmental health and the wealth of nations: Social, biological, and educational dynamics*. New York, NY: Guilford Press; 1999.
2. Raphael D, ed. *Social determinants of health: Canadian perspectives*. Toronto, Ontario: Canadian Scholar's Press; 2004.
3. Willms JD, ed. *Vulnerable children: Findings from Canada's National Longitudinal Survey of Children and Youth*. Edmonton, Alberta: University of Alberta Press; 2002.
4. Browne GB. Early childhood education and health. In: Raphael D, ed. *Social determinants of health: Canadian perspectives*. Toronto, Ontario: Canadian Scholar's Press; 2004:125-137.
5. Dunst CJ, Trivette CM. Empowerment, effective helpgiving practices and family-centered care. *Pediatric Nursing* 1996;22(4):334-337, 343.
6. Trivette CM, Dunst CJ. Family-centered helpgiving practices. Communication présentée à: 14th Annual Division for Early Childhood International Conference on Children with Special Needs; Décembre, 1998; Chicago, Ill.
7. Dunst CJ, Trivette CM. *Parenting supports and resources, helpgiving practices, and parenting competence*. Asheville, NC: Winterberry Press; 2001.
8. Walker TB, Rodriguez GG, Johnson DL, Cortez CP. Avance parent-child education program. In: Smith S, ed. *Two generation programs for families in poverty: A new intervention strategy*. Westport, Conn: Ablex Publishing; 1995:67-90. *Advances in applied developmental psychology*; vol 9.
9. Layzer JI, Goodson BD, Bernstein L, Price C. *National evaluation of family support programs: Final report*. Cambridge, Mass: Abt Associates; 2001.
10. Reynolds AJ, Mavrogenes NA, Bezruczko N, Hagemann M. Cognitive and family-support mediators of preschool effectiveness: A confirmatory analysis. *Child Development* 1996;67(3):1119-1140.
11. Reynolds AJ, Ou S-R, Topitzes JW. Paths of effects of early childhood intervention on educational attainment and delinquency: A confirmatory analysis of the Chicago Child-Parent Centers. *Child Development* 2004;75(5):1299-1328.
12. Fleming D, McDonald L, Drummond J, Kysela GM. Parent training: can intervention improve parent-child interactions? *Exceptionality Education Canada*. Sous presse.
13. Letourneau N, Drummond J, Fleming D, Kysela GM, McDonald L, Stewart M. Supporting parents: Can intervention improve parent-child relationships? *Journal of Family Nursing* 2001;7(2):159-187.
14. Drummond J, Fleming D, McDonald L, Kysela GM. Randomized controlled trial of a family problem-solving intervention. *Clinical Nursing Research* 2005;14(1):57-80.
15. Lonigan CJ, Elbert JC, Johnson SB. Empirically supported psychosocial interventions for children: An overview. *Journal of Clinical Child Psychology* 1998;27(2):138-145.

16. Weisz JR, Donenberg GR, Han SS, Weiss B. Bridging the gap between laboratory and clinic in child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology* 1995;63(5):688-701.
17. Hoagwood K, Hibbs E, Brent D, Jensen P. Introduction to the special section: Efficacy and effectiveness in studies of child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology* 1995;63(5):683-687.
18. Bischoff RJ, Sprenkle DH. Dropping out of marriage and family therapy: a critical review research. *Family Process* 1993;32(3):353-375.
19. Britton JA, Gammon MD, Kelsey JL, Brogan DJ, Coates RJ, Schoenberg JB, Potischman N, Swanson CA, Stanford JL, Brinton LA. Characteristics associated with recent recreational exercise among women 20 to 44 years of age. *Women and Health* 2000;31(2-3):81-96.
20. Lipman EL, Offord DR, Boyle MH. What if we could eliminate child poverty? The theoretical effect on child psychosocial morbidity. *Social Psychiatry and Psychiatric Epidemiology* 1996;31(5):303-307.
21. Ross DP, Roberts P. *Income and child well-being: A new perspective on the poverty debate*. Ottawa, Ontario: Canadian Council on Social Development; 1999. Disponible sur le site: <http://www.ccsd.ca/pubs/inckids/index.htm> Accessed August 26, 2005.
22. Chisholm RF. On the meaning of networks. *Group and Organization Management* 1996;21(2):216-235.
23. Harris E, Wise M, Hawe P, Finlay P, Nutbeam D. *Working together: Intersectoral action for health*. Sydney, Australia: Commonwealth Department of Human Health and Services, Australian Centre for Health Promotion; 1995.
24. Browne G, Roberts J. *The Integration of Human Services Measure*. Hamilton, Ontario: McMaster University and Affiliated Health and Social Service Agencies; 2002.
25. Browne G, Byrne C, Roberts J, Gafni A, Watt S, Haldane S, et al. Benefiting all the beneficiaries of social assistance: The 2-year effects and expense of subsidized versus nonsubsidized quality child care and recreation. *National Academies of Practice Forum: Issues in Interdisciplinary Care* 1999;1(2):131-142.
26. Huxham C, Vangen S. Leadership in the shaping and implementation of collaboration agendas: How things happen in a (not quite) joined-up world. *Academy of Management Journal* 2000;43(6):1159-1175.
27. Lasker RD, Weiss ES, Miller R. Partnership synergy: A practical framework for studying and strengthening the collaborative advantage. *Milbank Quarterly* 2001;79(2):179-205.
28. Organization for Economic Cooperation and Development. *Strategic governance and policy-making: Building policy coherence*. Paris, France: OECD; 2000.
29. Browne G, Byrne C, Roberts J, Gafni A, Whittaker S. When the bough breaks: Provider-initiated comprehensive care is more effective and less expensive for sole-support parents on social assistance. *Social Science and Medicine* 2001;53(12):1697-1710.
30. Browne G, Roberts J, Byrne C, Gafni A, Weir R, Majumdar B. Translating research. The costs and effects of addressing the needs of vulnerable populations: Results of 10 years of research. *Canadian Journal of Nursing Research* 2001;33(1):65-76.

Parenting Styles and Child Social Development

Lea Bornstein, BA, Marc H. Bornstein, PhD

University of Pennsylvania, USA, National Institute of Child Health and Human Development, USA

December 2014, 3e éd.

Introduction

During the first years of life – thought by many to be a unique period of human development – parents assume special importance. As parents guide their young children from complete infantile dependence into the beginning stages of autonomy, their styles of caregiving can have both immediate and lasting effects on children’s social functioning in areas from moral development to peer play to academic achievement. Ensuring the best possible outcome for children requires parents to face the challenge of balancing the maturity and disciplinary demands they make to integrate their children into the family and social system with maintaining an atmosphere of warmth, responsiveness and support. When parent conduct and attitude during the preschool years do not reflect an appropriate balance on these spectra, children may face a multitude of adjustment issues. *What parenting styles best achieve this balance?*

Subject

There are probably almost as many opinions on what constitutes “good parenting” as there are people asked. New parents often receive advice and guidance on how to parent from their parents and experts, as well as from peers and popular culture. Developing an appropriate parenting style during the first years of a child’s life is a challenging proposition for new parents, especially when not all sources agree. Research on effective parenting styles can help guide parents to a proper balance of sensitivity and control.

Problems

A major obstacle in family systems research is the question of relevance: Can researchers draw conclusions about parenting style that bridge cultural and socioeconomic gaps? Much research shows that the authoritative and flexible parenting style is optimal for the white, middle-class child from a nuclear family, but the same may not be true for other children growing up in other

circumstances and situations. Allowing children flexibility and freedom may result in positive outcomes when children live in safe areas and their peers are less likely to engage in dangerous behaviour, but in high-risk neighbourhoods, higher degrees of parental control might be necessary. Before policy-makers and clinicians can set guidelines or make recommendations regarding appropriate parenting behaviour, the extent to which the research conclusions apply to different ethnic/racial/cultural and socioeconomic groups must be evaluated. Furthermore, the positive and negative child outcomes associated with different types of parenting styles in preschool children may not necessarily apply to children at later stages of development. Longer-term outcomes must also be factored into policy-making and advising parents.

Research Context

Contemporary studies of parenting styles in large part expand on several concepts put forward in Diana Baumrind's formative research in the 1960s, which outlined a three-group classification system. Since the advent of this type of research, generally conducted through direct observation and by questionnaires and interviews with parents and children, classification has been based on evaluations along two broad dimensions of parenting styles: control/demandingness (claims parents make on a child relating to maturity, supervision and discipline) and responsiveness (actions that foster individuality, self-regulation and self-assertion by being attuned and supportive). Contemporary researchers typically classify parenting styles in four groups: authoritarian parenting, characterized by high levels of control and low levels of responsiveness; indulgent permissive parenting, characterized by low levels of control and high levels of responsiveness; authoritative parenting, characterized by high levels of both control and responsiveness; and neglectful parenting, characterized by lack of both control and responsiveness.

Recent Research Results

Research has generally linked authoritative parenting, where parents balance demandingness and responsiveness, with higher social competencies in children. Thus, children of authoritative parents possess greater competence in early peer relationships, engage in low levels of drug use as adolescents, and have more emotional well-being as young adults. Although authoritarian and permissive parenting styles appear to represent opposite ends of the parenting spectrum, neither style has been linked to positive outcomes, presumably because both minimize opportunities for children to learn to cope with stress. Too much control and demandingness may limit children's

opportunities to make decisions for themselves or to make their needs known to their parents, while children in permissive/indulgent households may lack the direction and guidance necessary to develop appropriate morals and goals. Research has also uncovered significant associations between parenting styles across generations; bad parenting appears to be “passed on” as much as good parenting.

Even though these kinds of results appear to be robust, their applicability across cultures and environments is questionable. Many studies focus on white, middle-class children and families, but children with different ethnic/racial/cultural or socioeconomic backgrounds may fare better under different types of guidance. Recent controversy concerns the outcomes of different parenting styles for child social development in low-SES, high-risk, inner-city families. While some research has suggested that more authoritarian parenting styles may be necessary in high-risk areas, other research has shown continued benefits of authoritative parenting. Factoring into this research is the idea that parenting may actually “matter less” among low-SES families due to the greater force of environmental factors, such as financial difficulties and higher crime rates.

Ethnic and cultural differences must also be taken into account in studying the effects of parenting styles on child social development. It is difficult to escape social pressures that judge some parenting styles to be better, usually those that reflect the dominant culture. Authoritarian parenting, which is generally linked to less positive child social outcomes, tends to be more prevalent among ethnic minorities. In Asian ethnic families, authoritarian parenting is linked to positive social outcomes and academic success, due in part to parenting goals and training specific to Asian-origin families.

Although parenting quality inevitably adjusts, improves or declines as children mature and parents face new and different challenges, some level of stability in parenting style over long periods of time obtains.

Conclusions

Information and education on optimal parenting styles and early establishment of effective practices are both important to a child’s social adjustment and success. In many situations, adoption of a flexible and warm authoritative parenting style is most beneficial for a child’s social, intellectual, moral and emotional growth. However, research in the area of parent-child

interaction must continue to expand to evaluate not only outcomes in a broader variety of ethnic/racial/cultural and socioeconomic groups, but also outcomes in children of different ages so that families in all types of situations can reap the full benefits of research.

Implications for the Policy and Services Perspective

The development of personality, morals, goals and problem-solving that occurs during the first years of life is critical and developmentally unlike any other time in the life course. It is important for family policy-makers and family support service workers to aid new parents in adopting appropriate parenting techniques and strategies to ensure that children receive guidance that will best allow them to succeed in later life. However, research into the broad applicability of certain types of parenting techniques must continue so that policy-makers can tailor advice and guidelines to optimize outcomes for every child.

References

1. Bornstein MH. *Handbook of Parenting*. 2nd ed. Mahwah, NJ: Erlbaum; 2002.
2. Darling N, Steinberg L. Parenting style as context: An integrative model. *Psychological Bulletin* 1993;113(3):487-496.
3. Grusec JE, Hastings PD. *Handbook of socialization: Theory and research*. New York, NY: Guilford Press; 2006.
4. Maccoby EE, Martin JA. Socialization in the context of the family: Parent-child interaction. In: Hetherington EM, ed. *Socialization, personality, and social development*. New York, NY: Wiley; 1983:1-101. Mussen PH, ed. *Handbook of child psychology*. 4th ed; vol 4.

The role of parents in early childhood learning

Susan H. Landry, PhD

Children's Learning Institute; University of Texas Health Science Center, USA

December 2014, Éd. rév.

Introduction

Children's development of the cognitive and social skills needed for later success in school may be best supported by a parenting style known as responsive parenting.¹ Responsiveness is an aspect of supportive parenting described across different theories and research frameworks (e.g. attachment, socio-cultural) as playing an important role in providing a strong foundation for children to develop optimally.²⁻⁴ Parenting that provides positive affection and high levels of warmth and is responsive in ways that are contingently linked to a young child's signals ("contingent responsiveness") are the affective-emotional aspects of a responsive style.⁵ These aspects, in combination with behaviours that are cognitively responsive to the child's needs, including the provision of rich verbal input and maintaining and expanding on the child's interests, provide the range of support necessary for multiple aspects of a child's learning.⁶

Acceptance of the child's interests with responses that are prompt and contingent to what the child signals supports learning, in part, by facilitating the child's development of mechanisms for coping with stress and novelty in his or her environment.² With repeated positive experiences, a trust and bond develop between the child and parent that in turn allow the child to ultimately internalize this trust and then generalize their learning to new experiences. This sensitive support promotes the child's continued engagement in learning activities with his or her parent.^{7,8} Thus, these affective-emotional behaviours communicate the parent's interest and acceptance, fostering self-regulation and cooperation, critically important behaviours for effective learning to occur. From a socio-cultural viewpoint, cognitively responsive behaviours (e.g. maintaining versus redirecting interests, rich verbal input) are thought to facilitate higher levels of learning because they provide a structure or scaffold for the young child's immature skills, such as developing attentional and cognitive capacities.⁹ Responsive behaviours in this framework promote joint engagement and reciprocity in the parent-child interaction and help a child learn to assume a more active and ultimately independent role in the learning process.¹⁰ Responsive support for the child to become actively engaged in solving problems is often referred to as parental scaffolding, and is also thought to be key for facilitating children's development of self-regulation and executive function skills, behaviours that allow the child to ultimately assume

responsibility for their well-being.^{11,12}

Subject

Responsive parenting is one of the aspects of parenting most frequently described when we try to understand the role the environment plays in children's development. Research shows it has the potential to promote normal developmental trajectories for high-risk children, such as those from low-income backgrounds and/or those with very premature births.¹³ In contrast, unresponsive parenting may jeopardize children's development, particularly those at higher risk for developmental problems.¹⁴ The critical importance of responsive parenting is highlighted by recent evidence identifying links between high levels of early responsive parenting and larger hippocampal volumes for normally developing preschool aged children. Increased volume in this brain region is associated with more optimal development of a number of psychosocial factors (e.g., stress reactivity).¹⁵ Links between early responsive parenting and increased volume in the hippocampal region also suggest that the early developmental period is an important time to facilitate responsive parenting practices, especially in high risk families, in order to enhance the parent-child relationship. Given the potential importance of responsive parenting, more specific knowledge of the types of behaviours that are most important for supporting particular areas of a child's learning could further our understanding of how to facilitate effective parenting practices.

Problem

Despite the central role for responsive parenting in different research frameworks, much of what we know about this parenting style comes from descriptive studies. This means that we can only infer the importance of responsive parenting. To assume a causal influence of responsive parenting on child outcomes would require data from experimental studies with random assignment. A strong body of experimental studies that demonstrate how greater degrees of responsive parenting promote higher levels of learning could provide a clearer understanding of the mechanism by which responsive behaviours promote a child's learning. Fortunately, there is growing evidence from interventions targeting the facilitation of responsive parent practices that show positive results and some evidence that when responsive behaviours are increased children showed at least short-term increases in cognitive, social, and emotional skills.^{16,17} However, many questions still need to be addressed including whether there is specificity between particular responsive behaviours and the support they provide for certain areas of child development as well as whether there are sensitive periods of early development when particular types of responsive behaviours are most helpful.

Research Context

Young children's acquisition of problem solving, language and social-emotional skills is facilitated by interactions with their parents. There is some evidence that the mechanism by which responsiveness supports a child's development may be dependent on consistency across development in this parenting style.^{13,18} As the child and parent are part of a broader social context, many factors may support or impinge on a parent's consistent use of responsive behaviours. Personal factors that may compromise a parent's responsiveness include depression, perception of the parent's own child-rearing history as negative, or beliefs and attitudes that detract from a parent's sense of importance in his or her child's life.¹⁹ However, other factors, such as higher levels of social support from friends and family, can buffer some of these negative social-personal factors¹³ as well as predict which parents move from a non-responsive to a responsive style with intervention.²⁰ This is an encouraging finding, as parenting interventions can be developed to provide a level of social support mothers from high-risk social backgrounds need in order to develop responsive parenting styles.²¹

Key Research Questions

1. Do increases in parent responsiveness behaviours result in increases in young children's learning?
2. Can interventions targeting responsive parenting work for different types of high risk parents?
3. Do increases in the various aspects of responsiveness explain the positive changes in different aspects of cognitive and social development?
4. Is there an optimal time in the child's development when responsiveness is particularly important, or is consistency across development necessary for more optimal learning to occur?
5. Is parental responsiveness equally effective, or does its effectiveness vary for children with varying characteristics (e.g., socio-economic status, ethnicity, biological risk factors)?

Recent Research Results

A recent random assignment intervention study examined whether mothers' responsive behaviours could be facilitated and whether such behaviours would boost young children's learning.⁶ To also examine the most optimal timing for intervention (e.g. across infancy versus

the toddler/preschool period versus both), families from the intervention and non-intervention groups were re-randomized at the end of the infancy phase, to either receive the responsiveness intervention in the toddler/preschool period or not.²² The intervention was designed to facilitate mothers' use of key behaviours that provided affective-emotional support and those that were cognitively responsive, as both types of support were expected to be necessary to promote learning. After the infancy phase, mothers receiving the intervention showed strong increases in all responsiveness behaviours and their infants showed higher levels and faster growth rates in a range of skills. For example, independent problem-solving during toy play showed greater increases for infants whose mothers received the intervention compared to infants whose mothers did not receive the intervention. Affective-emotional and cognitively responsive behaviours together mediated the effect of the intervention on children's learning, demonstrating that the effectiveness of responsiveness can best be understood if defined as a broad construct. In addition, different aspects of children's learning were specifically improved by certain specific responsive behaviours. For instance, children's cooperation was best improved by mothers' increased use of contingent responsiveness and verbal encouragement and by their less frequent restriction of the children's activities, while children's use of words was best improved by mothers' more frequently maintaining children's attention on their interests and labelling objects or actions.

Examination of evidence for the most optimal timing of an intervention showed that it depended upon factors such as the type of support a responsive behaviour provided and the degree to which it was linked to a child's developmental needs. For example, behaviours such as warm sensitivity (from an attachment framework) were best facilitated during the infancy phase, while those that were more complex, as they had to be responsive to the child's changing developmental picture (e.g., contingent responsiveness), required both intervention phases. The effects of the intervention also generalized to positively influence parent and child behaviours during a shared book reading activity, even though this activity was not a specific focus of the intervention.²³ The intervention worked equally well with children who were or were not at high biological risk.^{13,22} This supports the notion that responsiveness facilitates learning through parental sensitivity and willingness to meet young children's individual needs. Finally, interventions targeting responsive parenting practices also show similar positive effects for parents of varying risk factors (e.g., teen versus adult parents).²⁴

Research Gaps

Recent findings from experimental studies demonstrate that some areas of a child's learning are best supported by specific responsiveness behaviours or combinations of these. Now research is needed to further delineate this specificity between particular types of responsive support and particular developmental goals.

Expanding our understanding of how responsive parenting looks and works across different family and child characteristics would add to the development of a more highly specified model of responsive parenting. Finally, determination of what supports need to be in place to assist parents with their attempts to be responsive could enhance the effectiveness of responsive parent interventions.

Conclusions

Responsive parenting, according to many descriptive studies and fewer experimental studies, is an important process for supporting young children's learning. There is now support for a causal role of responsive parenting, as greater gains in the parental behaviours associated with a responsive style were responsible for the effect of several parenting interventions on greater gains in young children's learning.^{6,22,24} Also, recent evidence for normally developing children showing links between early high levels of responsive parenting and increased volume in brain regions responsible for regulation of stress suggests the critical importance of this parent practice in early development.¹⁵

As both normal and high-risk children benefited from responsiveness that provided affective-emotional and cognitively responsive support, the effectiveness of responsiveness seems best understood when it is defined as a broad construct. Recent evidence shows that certain responsive behaviours may provide different types of support for children's learning and this support may vary depending on a child's developmental needs. There are many new research avenues that need to be explored and questions addressed in recent studies that require further examination.

Implications

The importance of responsive parenting for young children's well-being has many policy implications. Policy and practice decision-makers need to pay particular attention to parents who are most at risk: they need find ways to facilitate change in parents' behaviours, taking into consideration factors such as parent beliefs, social support, mental health status, in order to maximize effectiveness. Synthesis of relevant research should guide new investments in parent

programs and the development of research initiatives concerning responsive parenting. Developmental science is frequently not well integrated into policy or program application. Given the critically important role of early experience in brain development, policy-makers have an interest in making sure that young children's environments (e.g. home, child care) are of high enough quality to promote positive outcomes. When new investments are made in publicly funded services for children and families, there is often a greater emphasis on accountability. This should serve to encourage a greater consideration of research-based evidence that can better assure program effectiveness.

References

1. Bornstein MH, Tamis-LeMonda CS. Maternal responsiveness and cognitive development in children. In: Bornstein MH, ed. *Maternal responsiveness: Characteristics and consequences*. San Francisco, CA: Jossey-Bass; 1989:49-61.
2. Ainsworth M, Blehar M, Waters E, Wall S. *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum; 1978.
3. Grusec JE, Goodnow JJ. Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology* 1994;30(1):1-19.
4. Rogoff B. *Apprenticeship in Thinking*. New York, NY: Oxford University Press; 1990.
5. Stroufe LA. Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaptation and competence. In: Perlmutter M, ed. *Minnesota Symposia in Child Psychology*. Hillsdale, NJ: Erlbaum; 1983:41-83. Vol. 16.
6. Landry SH, Smith KE, Swank PR. Responsive parenting: Establishing early foundations for social, communication, and independent problem solving. *Developmental Psychology* 2006;42(4):627-642.
7. Maccoby EE, Martin JA. Socialization in the context of the family: Parent-child interactions. In: Mussen PH, Hetherington EM, eds. *Handbook of child psychology*. 4th ed. New York, NY: Wiley; 1983:1-101. *Socialization, personality, and social development*; vol. 4.
8. Baumrind D. Rearing competent children. In: Damon W, ed. *Child development today and tomorrow*. San Francisco, CA: Jossey-Bass; 1989:349-378.
9. Tomasello M, Farrar JM. Joint attention and early language. *Child Development* 1986;57(6):1454-1463.
10. Vygotsky LS. *Mind in society: The development of higher psychological processes*. Cambridge, United Kingdom: Harvard University Press; 1978.
11. Bernier A, Carlson SM, Whipple N. From external regulation to self-regulation: Early parenting precursors of young children's executive functioning. *Child Development* 2010;81:326-339.
12. Hammond SI, Muller U, Carpendale JIM, Bibok MB, Liebermann-Finestone DP. *Developmental Psychology* 2012;48(1):271-281.
13. Landry SH, Smith KE, Swank PR, Assel MA, Vellet S. Does early responsive parenting have a special importance for children's development or is consistency across early childhood necessary? *Developmental Psychology* 2001;37(3):387-403.
14. Landry SH, Smith KE, Miller-Loncar CL, Swank PR. Predicting cognitive-linguistic and social growth curves from early maternal behaviors in children at varying degrees of biological risk. *Developmental Psychology* 1997;33(6): 1040-1053.

15. Luby JL, Barch DM, Belden A, Gaffrey MS, Tillman R, Casey B, Tomoyuki N, Suzuki H, Botteron KN. Maternal support in early childhood predicts larger hippocampal volumes at school age. *Proceedings of the National Academy of Science* 2012;109(8):2854-5849.
16. Van Zeijl J, Mesman J, Van IJzendoorn MH, Bakermans-Kraneburg MJ, Juffer F, ..., Alink LRA. Attachment-based intervention for enhancing sensitive discipline in mothers of 1- to 3-year-old children at risk for externalizing behavior problems: A randomized controlled trial. *Journal of Consulting and Clinical Psychology* 2006;74:994-1005.
17. Dunst CJ, Kassow DZ. Caregiver sensitivity, contingent social responsiveness, and secure infant attachment. *Journal of Early and Intensive Behavior Intervention* 2008;5:40-56.
18. Bradley RH, Caldwell BM, Rock S. Home environment and school performance: A ten year followup and examination of three models of environmental action. *Child Development* 1988;59(4):852-867.
19. Belsky J, Hertzog C, Rovine M. Causal analyses of multiple determinants of parenting: Empirical and methodological advances. In: Lamb M, Brown A, Rugoff B, eds. *Advances in Developmental Psychology*. Hillsdale, N.J.: Lawrence Erlbaum Associates;1986:153-202. Vol 4.
20. Guttentag C, Pedrosa-Josic C, Landry SH, Smith KE, Swank PR. Individual variability in parenting profiles and predictors of change: Effects of an intervention with disadvantaged mothers. *Journal of Applied Developmental Psychology* 2006; 27(4):349-369.
21. Dieterich SE, Landry SH, Smith KE, Swank PR. Impact of community mentors on maternal behaviors and child outcomes. *Journal of Early Intervention* 2006; 28(2):111-124.
22. Landry SH, Smith KE, Swank PR, Guttentag C. A responsive parenting intervention: The optimal timing across early childhood for impacting maternal behaviors and child outcomes. *Developmental Psychology* 2008;44(5):1335-1353.
23. Landry SH, Smith KE, Swank PR, Zucker T, Crawford AD, Solari EF. The effects of a responsive parenting intervention on parent-child interactions during shared book reading. *Developmental Psychology*. 2012;48(4), 366-392
24. Guttentag CL, Landry SH, Williams JM, Baggett KM, Noria CW, Borkowski JG, Swank PR, Farris JR, Crawford AD, Lanzi RG, Carta JJ, Warren SF, Ramey SL. "My baby & me": Effects of an early comprehensive parenting intervention on at-risk mothers and their children. *Developmental Psychology* 2014;50(5), 1482-1496.

Note:

First edition of this paper was financed by the Canadian Council on Learning - Early Childhood Learning Knowledge Centre

Parents' Role in Fostering Young Children's Learning and Language Development

Catherine S. Tamis-LeMonda, PhD, Eileen T. Rodriguez, PhD

New York University, USA

December 2014, 3e éd.

Introduction

During the first years of life, children undergo major developmental changes across a range of domains. In particular, the entry into “formal language” is one of the most heralded achievements of early development. Language enables children to share meanings with others, and to participate in cultural learning in unprecedented ways. Moreover, language is foundational to children’s school readiness and achievement. For these reasons, a vast body of research has been dedicated to understanding the social-contextual factors that support children’s early language and learning. This work is also central to practitioners, educators and policy makers who seek to promote positive developmental outcomes in young children.

Subject

Developmental scholars have long been interested in documenting the social experiences that help explain within- and between-group variation in children’s early language and learning.^{1,2} This work is anchored in the writings of scholars such as Bruner^{3,4} and Vygotsky,⁵ who posited that learning occurs in a socio-cultural context in which adults and primary caregivers support or “scaffold” young children to higher levels of thinking and acting. According to this view, children who experience sensitive, cognitively stimulating home environments early in development are at an advantage in the learning process.

Problem

Research into the factors that promote positive language growth and learning in young children is central to addressing achievement gaps that exist in children from different ethnic, language, racial, and socioeconomic backgrounds. Children enter school with different levels of skill, and these initial differences often affect children’s subsequent language growth, cognitive development, literacy and academic achievement.^{6,7,8} Children who exhibit delays at the onset of

schooling are at risk for early academic difficulties and are also more likely to experience grade retention, special education placement, and failure to complete high school.^{9,10,11}

These delays are particularly evident in children living in poverty. Children from low-income households lag behind their peers in language skills from early on,^{2,12} and have been shown to develop vocabularies at slower rates than their peers from more economically advantaged households.⁷ Smaller receptive and productive vocabularies, in turn, predict children's later reading and spelling difficulties in school.^{8,13}

Research Context

The demographic profiles of minority and immigrant populations in the U.S. and Canada have changed dramatically over the past decade— a shift that has generated research on the widespread disparities that exist in children's school readiness across ethnic, racial and socioeconomic lines.^{14,15,16,17,18} Because group disparities in learning exist prior to kindergarten, researchers and practitioners alike seek to understand the role of children's early home environment in the learning process.^{19,20,21,22,23}

Research Questions

Inquiry into the role of the home environment on young children's language and learning can be classified under two broad questions:

1. Which aspects of parenting matter for children's early language and learning, and why?
2. What factors enable parents to provide a supportive environment to their young children?

Recent Research Results

Which aspects of parenting matter, and why?

Three aspects of parenting have been highlighted as central to children's early language and learning: (1) the frequency of children's participation in routine *learning activities* (e.g., shared bookreading, storytelling); (2) the *quality of caregiver-child engagements* (e.g., parents' cognitive stimulation and sensitivity/responsiveness); and (3) the provision of age-appropriate *learning materials* (e.g., books and toys).²⁴

Early and consistent participation in routine *learning activities*, such as shared book reading, storytelling, and teaching about the letters of the alphabet, provide children with a critical foundation for early learning, language growth and emergent literacy.^{25,26,27,28} Routine activities provide young children with a familiar structure for interpreting others' behaviors and language, anticipating the temporal sequencing of events, and drawing inferences from new experiences.^{29,30} Moreover, engagement in learning activities expands children's vocabularies and conceptual knowledge.³¹ In particular, shared bookreading, as well as the sharing of oral stories, facilitate young children's vocabulary growth, phonemic skills, print concept knowledge, and positive attitudes toward literacy.^{25,27,32,33,34,35}

A plethora of studies also indicate that the *quality of parent-caregiver interactions* plays a formative role in children's early language and learning. In fact, the amount and style of language that parents use when conversing with their children is one of the strongest predictors of children's early language. Children benefit from exposure to adult speech that is varied and rich in information about objects and events in the environment.^{7,36,37} Additionally, parents who contingently respond to their young children's verbal and exploratory initiatives (through verbal descriptions and questions) tend to have children with more advanced receptive and productive language, phonological awareness, and story comprehension skills.^{38,39,40,41}

Finally, the *provision of learning materials* (e.g., books, toys that facilitate learning) has been shown to support young children's language growth and learning.^{42,43,44} Learning materials provide opportunities for caregiver-child exchanges about specific objects and actions, such as when a parent and child pretend to cook a meal. In such instances, materials serve as a vehicle for communicative exchanges around a shared topic of conversation. Specifically, exposure to toys that enable symbolic play and support the development of fine motor skills has been shown to relate to children's early receptive language skills, intrinsic motivation and positive approaches to learning.^{45,46} In addition, children's familiarity with storybooks has been linked to their receptive and expressive vocabularies and early reading abilities.^{26,27}

What factors predict positive parenting?

Researchers agree that parenting is multiply determined by characteristics of both parents and children. In terms of parent characteristics, parent age, education, income, and race/ethnicity (to name a few) have all been shown to relate to the three aspects of parenting discussed above. For example, compared to older mothers, teen mothers display lower levels of verbal stimulation and

involvement, higher levels of intrusiveness, and maternal speech that is less varied and complex.^{47,48} Mothers with fewer years of education read to their children less frequently^{25,49} and demonstrate less sophisticated language and literacy skills themselves,⁵⁰ which affects the quantity and quality of their verbal interactions with their children.² Parental education, in turn, relates to household income: poverty and persistent poverty are strongly associated with less stimulating home environments,⁵¹ and parents living in poverty have children who are at risk for cognitive, academic, and social-emotional difficulties.^{52,53} Finally, Hispanic and African American mothers are, on average, less likely to read to their children than White, non-Hispanic mothers;⁵⁴ and Spanish-speaking Hispanic families have fewer children's books available in the home as compared to their non-Hispanic counterparts.²⁵ These racial and ethnic findings are likely explained by differences in family resources across groups, as minority status is often associated with various social-demographic risks.

Child characteristics, such as gender and birth order (as two of many examples), have also been linked to early measures of language and learning. For example, girls tend to have a slight advantage over boys in the early stages of vocabulary development,^{55,56,57} and studies have documented that families spend substantially more time in literacy-related activities with girls than with boys.⁵⁸ Firstborn children have slightly larger vocabularies on average than their later-born peers.⁵⁹ Further, mothers differ in their language, engagement and responsiveness toward their first- and laterborn children, with input favoring firstborns.⁶⁰

Research Gaps

In light of evidence that children from low-income and minority backgrounds are more likely to exhibit delays in language and learning at school entry, additional work is needed to understand why these differences exist, and how to best support parents in their provision of positive home environments for their children. Future research should investigate the ways in which multiple aspects of the home learning environment jointly contribute to developmental outcomes in children. Moreover, studies on “school readiness” should begin at the earliest stages of infancy, as this is the period when foundational language and knowledge develops. In this regard, research on the language development and school readiness of children from language minority households should focus on how in- and out-of-home language experiences jointly contribute to children's proficiency in both English and their native language. Finally, most research on the social context of children's language and learning is focused on children's interactions with

mothers. Given the rich social networks that comprise infants' and toddlers' environments, future studies should examine the literacy opportunities offered by multiple members of young children's social worlds, including fathers, siblings, extended family members, and childcare providers.

Conclusions

There exists irrefutable evidence for the importance of children's early language and learning for later school readiness, engagement and performance. Children's experiences at home are critical to early language growth and learning. In particular, three aspects of the home literacy environment promote children's learning and language: learning activities (e.g., daily book reading), parenting quality (e.g., responsiveness), and learning materials (e.g., age-appropriate toys and books). Additionally, parents with more resources (e.g., education, income) are better able to provide positive learning experiences for their young children. Finally, children also play a key role in their own learning experiences, as exemplified by links between child characteristics and parenting behaviors. Children affect parents just as parents affect children; it is therefore critical to acknowledge the transactional nature of children's early language and learning experiences.⁶¹

Implications

Research on children's early learning environments is relevant to policy makers, educators, and practitioners who seek to promote the positive language development and learning of young children. Intervention and preventive efforts should target multiple aspects of children's early language and learning environments, including supporting parents in their provision of literacy-promoting activities, sensitive and responsive engagements, and age-appropriate materials that facilitate learning. Moreover, these efforts should begin early in development, as children are likely to benefit most from supportive home environments during the formative years of rapid language growth and learning.^{22,62,63} Finally, interventions with parents that aim to support children's learning should attend to the cultural context of early development when working with parents from different backgrounds, and also consider the broader social context of parenting by attending to the barriers created by poverty and low parental education.

References

1. Burns MS, Griffin P, Snow CE, eds. *Starting out Right: A Guide to Promoting children's Reading Success. Specific Recommendations from America's Leading Researchers on How To Help Children Become Successful Readers*. Washington, DC: National Academy Press; 1999.
2. Hoff E. The specificity of environmental influence: Socioeconomic status affects early vocabulary development via maternal speech. *Child Development* 2003;74(3):1368-1378.
3. Bruner JS. The ontogenesis of speech acts. *Journal of Child Language* 1975;2(1): 1-19
4. Bruner J. *Child's Talk: Learning to use Language*. New York, NY: Norton; 1983
5. Vygotsky LS. *Myshlenie i rech'*. [Thought and language]. Cambridge, MA: MIT Press; 1962.
6. Dickinson DK. *Bridges to Literacy: Children, Families, and Schools*. Cambridge, MA: Blackwell; 1994.
7. Hart B, Risley T. *Meaningful Differences in the Everyday Experiences of Young American Children*. Baltimore, MD: Paul H. Brookes; 1995.
8. Snow CE, Porche MV, Patton ED, Tabors PO, Harris SR. *Is Literacy Enough? Pathways to Academic Success for Adolescents*. Baltimore, MD: Paul H. Brookes Publishing; 2007.
9. Campbell FA, Ramey CT. Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development* 1994;65(2):684-698.
10. Kaufman P, Alt MN, Chapman CD. *Dropout Rates in the United States: 2001. Statistical Analysis Report NCES 2005-046*. Washington, DC: National Center for Education Statistics; 2004.
11. Lee VE, Burkam DT. *Inequity at the Starting Gate: Social Background differences in Achievement as Children Begin School*. Washington, DC: Economic Policy Institute, 2002.
12. Nord CW, Lennon J, Liu B, Chandler K. *Home literacy activities and signs of children's emerging literacy: 1993 and 1999. Education Statistics Quarterly* 2000;2(1):19-27.
13. Duncan GJ, Dowsett CJ, Claessens A, Magnuson K, Huston AC, Klebanov P, Pagani LS, Feinstein L, Engel M, Brook-Guns J, Sexton H, Duckworth K, Japel C. School readiness and later achievement. *Developmental Psychology* 2007;43(3):1428-1446.
14. Federal Interagency Forum on Child and Family Statistics. *America's Children: Key National Indicators of Well-Being, 2005*. Washington, DC: Federal Interagency Forum on Child and Family Statistics; 2009.
15. Ferguson HB, Bovaird S, Mueller MP. The impact of poverty on educational outcomes for children. *Paediatrics & Child Health* 2007;12(8):701-706.
16. KewalRamani A, Gilbertson L, Fox M, Provasnik S. *Status and Trends in the Education of Racial and Ethnic Minorities* (NCES 2007-039). Washington, DC: National Center for Education Statistics, Institute of Education Sciences. U.S. Department of Education; 2007.
17. Rouse CE, Brooks-Gunn J, McLanahan S, eds. School readiness: Closing racial and ethnic gaps. *The Future of Children* 2005;15(1):1-195.
18. Thomas EM. *Readiness to Learn at School among five-year-old Children in Canada*. Catalogue No. 89-599-MIE. No. 004. Ottawa, ON: Statistics Canada.
19. Beals DE, DeTemple JM, Dickinson DK. Talking and listening that support early literacy development of children from low-income families. In: Dickinson DK, ed. *Bridges to literacy: Children, Families, and Schools*. Cambridge, MA: Blackwell; 1994:19-40.
20. Chall JS, Jacobs VA, Baldwin LE. *The Reading Crisis: Why Poor Children Fall Behind*. Cambridge, MA: Harvard University Press; 1990.

21. Dickinson DK, DeTemple J. Putting parents in the picture: Maternal reports of preschoolers' literacy as a predictor of early reading. *Early Childhood Research Quarterly* 1998;13(2):241-261
22. Shonkoff J, Phillips D. *From Neurons to Neighborhoods*. Washington, DC: National Academy Press; 2000.
23. Whitehurst GJ, Lonigan CJ. Emergent literacy: Development from prereaders to readers. In: Neuman SB, Dickinson DK, eds. *Handbook of Early Literacy Research*. New York, NY: Guilford Press; 2003:11-29.
24. Rodriguez ET, Tamis-LeMonda CS, Spellmann ME, Pan BA, Raikes H, Lugo-Gil J, Luze G. The formative role of home literacy experiences across the first three years of life in children from low-income families. *Journal of Applied Developmental Psychology*. In press.
25. Raikes H, Pan BA, Luze G, Tamis-LeMonda CS, Brooks-Gunn J, Constantine J, Tarullo LB, Raikes HA, Rodriguez ET. Mother-child bookreading in low-income families: Correlates and outcomes during the first three years of life. *Child Development* 2006;77(4):924-953.
26. Payne AC, Whitehurst GJ, Angell AL. The role of home literacy environment in the development of language ability in preschool children from low-income families. *Early Childhood Research Quarterly* 1994;9(3-4):427-440.
27. Senechal M, LeFevre JA, Hudson E, Lawson P. Knowledge of storybooks as a predictor of young children's vocabulary. *Journal of Educational Psychology* 1996;88(3):520-536.
28. Snow CE, Dickinson DK. Social sources of narrative skills at home and at school. *First Language* 1990;10(29):87-103.
29. Nelson K. How children represent knowledge of their world in and out of language. In: Siegler RS, ed. *Children's Thinking: What Develops?* Hillsdale, NJ: Erlbaum; 1978:255-273.
30. Nelson K. *Event Knowledge: Structure and Function in Development*. Hillsdale, NJ: Erlbaum; 1986.
31. Bloom L. Language acquisition in its developmental context. In: Damon W, ed. *Handbook of Child Psychology*. 5th ed. New York, NY: J. Wiley; 1998:309-370. Kuhn D, Siegler RS, eds. Cognition, perception, and language; vol 2.
32. DeBaryshe BD. Joint picture-book reading correlates of early oral language skill. *Journal of Child Language* 1993;20(2):455-462.
33. Dickinson DK, Tabors PO. Early literacy: Linkages between home, school and literacy achievement at age five. *Journal of Research in Childhood Education* 1991;6(1):30-46
34. Lyytinen P, Laasko M, Poikkeus A. Parental contributions to child's early language and interest in books. *European Journal of Psychology of Education* 1998;13(3):297-308.
35. Wagner RK, Torgesen JK, Rashotte CA. Development of reading-related phonological processing abilities: New evidence of bidirectional causality from a latent variable longitudinal study. *Developmental Psychology* 1994;30(1):73-87.
36. Evans GW, Maxwell LE, Hart B. Parental language and verbal responsiveness to children in crowded homes. *Developmental Psychology* 1999;35(4):1020-1023.
37. Weizman ZO, Snow CE. Lexical input as related to children's vocabulary acquisition: Effects of sophisticated exposure and support for meaning. *Developmental Psychology* 2001;37(2):265-279.
38. Beals DE, DeTemple JM. Home contributions to early language and literacy development. *National Reading Conference Yearbook* 1993;42:207-215.
39. Hann DM, Osofsky JD, Culp AM. Relating the adolescent mother-child relationship to preschool outcomes. *Infant Mental Health Journal* 1996;17(4): 302-209.
40. Silven M, Niemi P, Voeten M. Do maternal interaction and early language predict phonological awareness in 3-to-4-year olds? *Cognitive Development* 2002;17(1): 1133-1155.

41. Tamis-LeMonda CS, Bornstein MH, Baumwell L. Maternal responsiveness and children's achievement of language milestones. *Child Development* 2001;72(3): 748-767.
42. Neuman SB, Roskos K. Access to print for children of poverty: Differential effects of adult mediation and literacy-enriched play settings on environmental and functional print tasks. *American Educational Research Journal* 1993;30(1): 95-122.
43. Senechal M, LeFevre JA, Thomas E, Daley K. Differential effects of home literacy experiences on the development of oral and written language. *Reading Research Quarterly* 1998;33(1):96-116.
44. Tabors PO, Roach KA, Snow CE. Home language and literacy environment: Final results. In: Dickinson DK, Tabors PO, eds. *Beginning Literacy with Language: Young Children Learning at Home and School*. Baltimore: Paul H. Brookes;2001:111-138.
45. Tomopoulos S, Dreyer BP, Tamis-LeMonda C, Flynn V, Rovira I, Tineo W, Mendelsohn AL. Books, toys, parent-child interaction, and development in young Latino children. *Ambulatory Pediatrics* 2006;6(2):72-78.
46. Gottfried AE, Fleming JS, Gottfried AW. Role of cognitively stimulating home environment in children's academic intrinsic motivation: A longitudinal study. *Child Development* 1998;69(5):1448-1460.
47. Keown LJ, Woodward LJ, Field J. Language development of pre-school children born to teenage mothers. *Infant and Child Development* 2001;10(3):129-145.
48. Whiteside-Mansell L, Pope SK, Bradley RH. Patterns of parenting behavior in young mothers. *Family Relations* 1996;45(3):273-281.
49. Scarborough HS, Dobrich W. On the efficacy of reading to preschoolers. *Developmental Review* 1994;14(3):245-302.
50. Rowe ML, Pan BA, Ayoub C. Predictors of variation in maternal talk to children: A longitudinal study of low-income families. *Parenting: Science and Practice* 2005;5(3):259-283.
51. Garrett P, Ng'andu N, Ferron J. Poverty experiences of young children and the quality of their home environments. *Child Development* 1994;65(2):331-345.
52. Brooks-Gunn J, Duncan GJ. The effects of poverty on children. *The Future of Children* 1997;7(2):55-71.
53. Smith JR, Brooks-Gunn J, Klebanov PK. The consequences of living in poverty for young children's cognitive and verbal ability and early school achievement. In: Duncan GJ, Brooks-Gunn J, eds. *Consequences of Growing Up Poor*. New York: Russell Sage; 1997: 132-189.
54. Yarosz DJ, Barnett WS. Who reads to young children? Identifying predictors of reading of family reading activities. *Reading Psychology* 2001;22(1):67-81.
55. Bornstein MH, Haynes OM, Painter KM. Sources of child vocabulary competence: A multivariate model. *Journal of Child Language* 1998;25(2):367-393.
56. Fenson L, Dale PS, Reznick JS, Bates E, Thal DJ, Pethick SJ. *Variability in Early Communicative Development*. Chicago, IL: Chicago Press; 1994. Monographs of the Society for Research in Child Development; vol 5(59).
57. Pan BA, Rowe ML, Singer J, Snow CE. Maternal correlates of toddler vocabulary production in low-income families. *Child Development* 2005;76(4):763-782.
58. Teale WH. Home background and young children's literacy development. In: Teale WH, Sulzby E, eds. *Emergent literacy: Writing and reading*. Norwood, NJ: Ablex.;1986:173-206.
59. Hoff-Ginsberg E. The relation of birth order and socioeconomic status to children's language experience and language development. *Applied Psycholinguistics* 1998;19(4):603-631.
60. Bornstein MH. Parenting Infants. In: Bornstein MH, ed. *Handbook of Parenting*. 2nd ed., Mahwah, NJ: Erlbaum Associates; 2002:3-44. Children and parenting; vol 1.

61. Sameroff AJ, Fiese BH. Models of development and developmental risk. In: Zeanah CH Jr., ed. *Handbook of Infant Mental Health*. 2nd ed. New York, NY: Guilford Press; 2005:3-19.
62. Tamis-LeMonda CS, Cristofaro TN, Rodriguez ET, Bornstein MH. Early language development: Social influences in the first years of life. In: Balter L, Tamis-LeMonda CS, eds. *Child Psychology: A Handbook of Contemporary Issues*. New York, NY: Psychology Press, 2006:79-108.
63. Hirsh-Pasek K, Burchinal M. Mother and caregiver sensitivity over time: Predicting language and academic outcomes with variable- and person-centered approaches. *Merrill-Palmer Quarterly* 2006;52(3):449-485.

Note:

This paper was financed by the Canadian Council on Learning - Early Childhood Learning Knowledge Centre

The Role of Parents in Children's School Transition

Philip A. Cowan, PhD, Carolyn Pape Cowan, PhD

University of California, Berkeley, USA

December 2014, 2e éd.

Introduction

The prevailing explanatory model of children's successful transition from preschool to elementary school assumes that major risk and protective factors lie primarily within the child in terms of cognitive and emotional "readiness" to enter kindergarten.¹ Consistent with this assumption, most intervention efforts involve school-based attempts to improve children's cognitive and self-regulation skills. Investigations of the social contexts and relationships that affect children's transition to school have only begun to emerge. Surprisingly, despite the general acknowledgment that parent-child relationships constitute central contexts for children's development,² there has been little attention to the roles parents play in children's transition to elementary school, and almost none to planning or evaluating interventions addressed to parents of preschoolers. We attempt to address these gaps.

Subject

In most studies of children's development, "parent" means mother, and parenting is studied in isolation from other family and social contexts in which parent-child relationships develop. We present a multidomain model of children's development that locates mother-child and father-child relationships within a system of relationships inside and outside the family, paying special attention to the quality of the relationship *between* the parents. We then describe the results of preventive interventions based on our conceptual model in the form of a couples group led by trained mental health professionals.

Problems

Challenges for the young pre-schooler about to enter kindergarten have been well documented.^{3,4,5} What makes this an especially important developmental transition period is the consistent evidence for a "trajectory hypothesis" in both middle-class and low-income samples: how children fare academically and socially in early elementary school is a strong predictor of their

academic, social, and mental health outcomes throughout high school.^{6,7,8} These findings imply that interventions to improve the child's relative standing at school entrance could have long-term payoff.

Research context and research gaps

Research claiming to demonstrate the importance of parent-child relationships in children's school adaptation has a number of important gaps. We lack longitudinal studies that trace family trajectories across the school transition. Information about fathers' potential role in their children's transition is extremely sparse. Only a handful of studies examine other aspects of the family system context (e.g., the couple relationship) that may affect how children fare. Finally, outside of early school-based interventions that focus on children's readiness, we have very little evidence concerning family-based interventions during the pre-school period that could help children meet the new challenges of entering school successfully.

Key research questions

What do we know from current research about parents' role in shaping children's transition to school? What do the findings tell us about interventions that might provide children with a "leg up" as they make the elementary school transition?

Recent research results

Concurrent correlations

It has been well-established in countless studies that parents who are warm, responsive to children's questions and emotions, provide structure, set limits and make demands for competence (authoritative parents, in Baumrind's terms) have children who are more likely to succeed in the early years of school and get along successfully with peers.^{9,10,11} The problem with these studies is that they do not establish antecedent-consequent connections.

Longitudinal studies

Only a few studies, including two of our own, assess families during the preschool period and again after the child has entered elementary school.^{8,12,13} The basic finding is of considerable consistency across the transition in terms of mothers', fathers', and children's characteristics; both mothers' and fathers' authoritative parenting style during the preschool period explains

significant variance in children's academic achievement and externalizing or internalizing behaviour with peers two and three years later.

The multidomain context of parenting

Our findings support a family systems risk model¹⁴ that explains children's cognitive, social and emotional development using information about five kinds of family risk or protective factors: (1) Each family member's level of adaptation, self-perceptions, mental health and psychological distress; (2) The quality of both mother-child and father-child relationships; (3) The quality of the relationship between the parents, including communication styles, conflict resolution, problem-solving styles and emotion regulation; (4) Patterns of both couple and parent-child relationships transmitted across the generations; and (5) The balance between life stressors and social supports outside the immediate family. Most studies of children's development focus on one or at most two of the five family risk and protective domains. We have shown that each domain, especially the quality of the couple relationship, contributes uniquely to predicting children's academic and social competence, and their internalizing and externalizing problem behaviours in early elementary school.¹⁵ Consistent with prevention science, then, we have identified a set of factors that can be targeted in interventions to lower the probability that children will have difficulties, and increase the probability that they will display both intellectual and social competence in early elementary school.

Family-based parenting interventions

Over the past 35 years we have conducted two randomized clinical trials in which some couples were randomly chosen to participate in couples groups led by trained mental health professionals, while others were not. The male-female co-leaders met with the couples weekly for at least 4 months.

In the Becoming a Family Project,¹² we followed 96 couples with interviews, questionnaires and observations over a period of five years from mid-pregnancy to their first child's completion of kindergarten. Some of the expectant couples, randomly chosen, were offered participation in a couples group that met with their co-leaders for 24 weeks over 6 months. Each group session included some open time to discuss personal events and concerns in their lives *and* a topic that addressed one of the aspects of family life in our conceptual model. We found that, while there was a decline in satisfaction as a couple in new parents without the intervention, the new parent couples who participated in an ongoing couples group maintained their level of satisfaction over

the next five years until their children had finished kindergarten. Five years after the couples groups ended, the quality of both the couple- and parent-child relationships measured when the child was 3-1/2 was significantly correlated with the children's adaptation to kindergarten (child self-reports, teacher ratings and tested achievement).

A second intervention study, the School Children and their Families Project¹⁶ followed another 100 couples from the year before their first child entered kindergarten until the children were in 11th grade. There were three randomly-assigned conditions – an opportunity to use our staff as consultants once a year (the control group), a couples group that emphasized parent-child relationships during the open-ended part of the evenings (the more traditional approach), or a couples group that focused more on the relationship between the parents during the open-ended parts. When the families were assessed during kindergarten and 1st grade, parents who had been in a group emphasizing parent-child relationships had improved in the aspects of parenting we observed in our project playroom, with no improvement in the control participants. By contrast, parents who had participated in a group in which the leaders focused more on parents' issues as a couple showed decreased conflict as a couple when we observed them, *and their parenting became more effective*.

Both intervention variations affected the children. The children of parents in the parenting-focused groups improved in positive self-image, and were less likely to show shy, withdrawn, depressed behaviour at school. Children of parents in the couple-focused groups were at an advantage in terms of higher scores on individually administered achievement tests, and lower levels of aggressive behaviour at school. The interventions continued to have a significant impact on the families over the next 10 years in terms of both self-reported and observed couple relationship quality and behaviour problems in the students. The impact of the couple-focused groups was always equal to or greater than the impact of the parenting-focused groups.¹⁷

Conclusions

In sum, we have shown through correlational studies that the quality of the parent-child and couple relationships is related to the children's early school adaptation. Through intervention studies, we see that changing the tone of couple and parent-child relationships has a long-term causal impact on children's adaptation to school.

Implications

Our emphasis on family relationships as important contexts for children's abilities to cope with the demands of elementary school admittedly poses a challenge for education policy makers and school personnel. We are suggesting reaching out to parents before children enter school and proposing that children will benefit from an enhanced relationship between their parents. It has been our experience during years of consulting to preschool and elementary school staff that very few have training in communicating with parents, and none are trained to provide interventions that might enhance co-parenting or couple relationships.

An obvious alternative would be to hire trained family educators, social workers, nurses or clinical psychologists to do the outreach and lead groups for couples. Of course this would be costly. What is as yet unknown is the balance between benefits and costs. If the cost of dealing with behaviour problem children to the school and society is greater than the cost of these family-based interventions, perhaps it is time to consider such an approach.

References

1. Rimm-Kaufman S., School transition and school readiness: An outcome of early childhood development. In: Tremblay RE, Barr RG, Peters RdeV, eds. *Encyclopedia on Early Childhood Development [online]*. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2004:1-7. Available at: <http://www.child-encyclopedia.com/pages/PDF/Rimm-KaufmanANGxp.pdf>. Accessed March 4, 2009.
2. Bornstein MH, ed. *Handbook of Parenting*. 2nd ed. Mahwah, N.J.: Erlbaum; 2002.
3. Pianta RC, Cox MJ, National Center for Early Development & Learning (U.S.), eds. *The transition to Kindergarten*. Baltimore, MD: P.H. Brookes Pub;1999.
4. Cowan PA, Heming G. How children and parents fare during the transition to school. In: Cowan PA, Cowan CP, Ablow JC, Johnson VK, Measelle JR, eds. *The Family Context of Parenting in Children's Adaptation to Elementary School*. Mahwah, NJ: L. Erlbaum Associates; 2005. Monographs in parenting series.
5. Sameroff AJ, Haith MM, eds. *The Five to Seven Year Shift: The Age of Reason and Responsibility*. Chicago, IL: The University of Chicago Press; 1996. The John D. and Catherine T. MacArthur Foundation series on mental health and development.
6. Entwisle DR, Alexander KL. Facilitating the transition to first grade: The nature of transition and research on factors affecting it. *The Elementary School Journal* 1998;98(4):351-364.
7. Kellam SG, Simon MB, Enslinger ME. Antecedents in first grade of teenage drug use and psychological well-being: A ten-year community-wide prospective study. In: Ricks DF, Dohrenwend BS, eds. *Origins of psychopathology: Research and public policy*. Cambridge, NY: Cambridge University Press; 1983.
8. Cowan PA, Cowan CP, Ablow JC, Johnson VK, Measelle JR, eds. *The Family Context of Parenting in Children's Adaptation to Elementary School*. Mahwah, NJ: L. Erlbaum Associates; 2005. Monographs in parenting series.
9. Baumrind D. New directions in socialization research. *American Psychologist* 1980;35(7):639-652.
10. Steinberg L. We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence* 2001;11(1):1-19.

11. Parke RD, Buriel R. Socialization in the family: Ethnic and ecological perspectives. In: Damon W, ed. *Handbook of Child Psychology*. 5th ed. New York : J. Wiley; 1998: 463-552. Eisenberg N, ed. *Social, Emotional, and Personality Development*; vol 3.
12. Cowan CP, Cowan PA. *When Partners Become Parents : the Big Life Change for Couples*. Mahwah, NJ: Lawrence Erlbaum Associates; 1999.
13. Barth JM, Parke RD. The impact of the family on children's early school social adjustment. In: Sameroff AJ, Haith MM, eds. *The Five to Seven Year Shift: The Age of Reason and Responsibility*. Chicago, IL: The University of Chicago Press; 1996: 329-361 The John D. and Catherine T. MacArthur Foundation series on mental health and development.
14. Cowan PA, Cowan CP. Interventions as tests of family systems theories: Marital and family relationships in children's development, and psychopathology. *Development and Psychopathology* 2002;14:731-760.
15. Cowan PA, Cowan CP. *Five-domain models: Putting it all together*. In: Cowan PA, Cowan CP, Ablow JC, Johnson VK, Measelle JR, eds. *The Family Context of Parenting in Children's Adaptation to Elementary School*. Mahwah, NJ: L. Erlbaum Associates; 2005. Monographs in parenting series.
16. Cowan CP, Cowan PA, Heming G. Two variations of a preventive intervention for couples: effects on parents and children during the transition to elementary school. In: Cowan PA, Cowan CP, Ablow JC, Johnson VK, Measelle JR, eds. *The Family Context of Parenting in Children's Adaptation to Elementary School*. Mahwah, NJ: L. Erlbaum Associates; 2005. Monographs in parenting series.
17. Cowan PA, Cowan CP. Group Interventions for parents of preschoolers: 10-year impact on family functioning and teen's adaptation. Paper presented at: SRA Biennial Meeting; March 23-26, 2006; San Francisco, California.

Note:

This paper was financed by the Canadian Council on Learning - Early Childhood Learning Knowledge Centre

Parent Supervision to Prevent Injuries to Young Children

Barbara A. Morrongiello, PhD, Brae Anne McArthur, PhD

University of Guelph, Canada

October 2018, Éd. rév.

Introduction

Caregivers must assume responsibility for the safety of infants, toddlers and preschoolers because children at these developmental stages have a limited capacity to appraise risk and differentiate unsafe from safe situations. Historically, research on child safety has focused on determining what safety practices caregivers adopt, why they do so, and how to motivate them to enact better safety practices.¹⁻⁶ More recently research has shifted to examine caregiver supervision practices, how these influence young children's risk of injury, and what messaging approaches are best to motivate caregivers to improve their supervision practices. These issues are addressed in this article.

Subject

For young children (< 6 years) researchers have defined supervision in terms of specific behaviours that indicate attending to the child (watching, listening).⁷ Proximity is particularly important for the safety of younger children under 6 years of age because they often do unpredictable things, and quickly, which increases exposure to and interactions with injury hazards.⁸

Problems

Epidemiology studies reveal that young children are frequently injured when in their homes,^{9,10} which is surprising given an adult caregiver should be present and responsible for children at these young ages. Two essential questions are: how are caregivers typically supervising and what constitutes 'adequate supervision' for ensuring a child's safety? Examining how patterns of supervision differentially influence children's risk of injury is an essential first step for determining what constitutes adequate supervision.

Research context

Historically, progress in exploring links between supervision and injury risk had been hampered by the difficulty of measuring supervision in scientifically rigorous ways. Asking parents to report on how they might supervise in different circumstances may or may not accurately reflect how they will do so in real life circumstances.^{11,12} Studies that have used direct observations (e.g., parents with children in public places like parks) and self-monitoring techniques (i.e., parents record their own supervisory practices at home throughout the day) have substantially advanced our understanding of factors that influence supervisory practices and how these practices impact children's risk of injury.¹³⁻¹⁵ Another popular testing approach to study supervision involves the use of 'contrived hazards' – hazards that appear real but that have been modified to pose no real risk of injury in laboratory settings.^{16,17} With this approach one creates a 'simulated' risk situation, and supervisors' reactions can be unobtrusively videotaped, providing a more accurate index of 'typical' supervision practices. These observation-based methods are time- and labour-intensive but have yielded substantial insights regarding links between supervision and child injury risk.

Key Research Questions

1. How often are children routinely 'out of view' of supervisors when at home? Are there parent and/or child attributes that influence children's supervision needs?
2. What patterns of supervision do caregivers show when at home with young children? Are some patterns more effective than others to prevent children from being injured?
3. Are siblings effective supervisors? What factors influence their effectiveness?

Research Findings

In research on how caregivers routinely supervise it was found that when young children (< 6 years) are at home with mothers they are supervised (in view, attended to) more than unsupervised (i.e., parent does not know where child is or what the child is doing – for at least 5 minutes). Nonetheless, young children are completely out of view of supervisors about 20% of their awake time, and the extent of supervision is poorer when they are out of view (e.g., intermittently listening in but not watching).^{18,19} Thus, in the course of their daily lives, parents routinely supervise in ways that can elevate children's risk of injury by allowing them to be out of view. Time children spend out of view of supervisors generally increases with children's age

because parents assume older children know and will follow safety rules better than younger children.²⁰ When sex differences emerge, girls are more closely supervised than boys during the preschool years, which may partly explain why boys routinely experience more injuries than girls.^{21,22}

Mothers who score higher in conscientiousness and those with children having behavioural attributes that are likely to increase risk behaviours (i.e., impulsivity, sensation seeking), keep their children in view more of the time.¹⁴ Thus, parents adjust their level of supervision based on both parent and child attributes. Importantly, research has shown that children who scored high in behavioural intensity (i.e., show high activity and intense reactions to new situations and events) had a history of more medically-attended injuries when parents reported reduced supervision but not when parents reported high levels of supervision (see Figure 1).²³ Thus, close supervision can counteract the elevated risk of injury typically found for temperamentally-difficult children.^{24,25} On the other hand, the child attribute of inhibitory control (e.g., child can exercise self-control and resist doing things prohibited by a caregiver) serves a protective function and scoring high in this trait predicts a history of fewer medically-attended injuries even under conditions of reduced supervision, whereas for children low in inhibitory control higher levels of supervision are needed to prevent injuries (see Figure 1).²³ Hence, whether lower levels of supervision lead to increased risk of injury depends, in part, on the child's behavioural attributes. Risk of injury to children, therefore, reflects an interaction of many factors, including child characteristics x supervision practices x level of environmental risk.²⁶

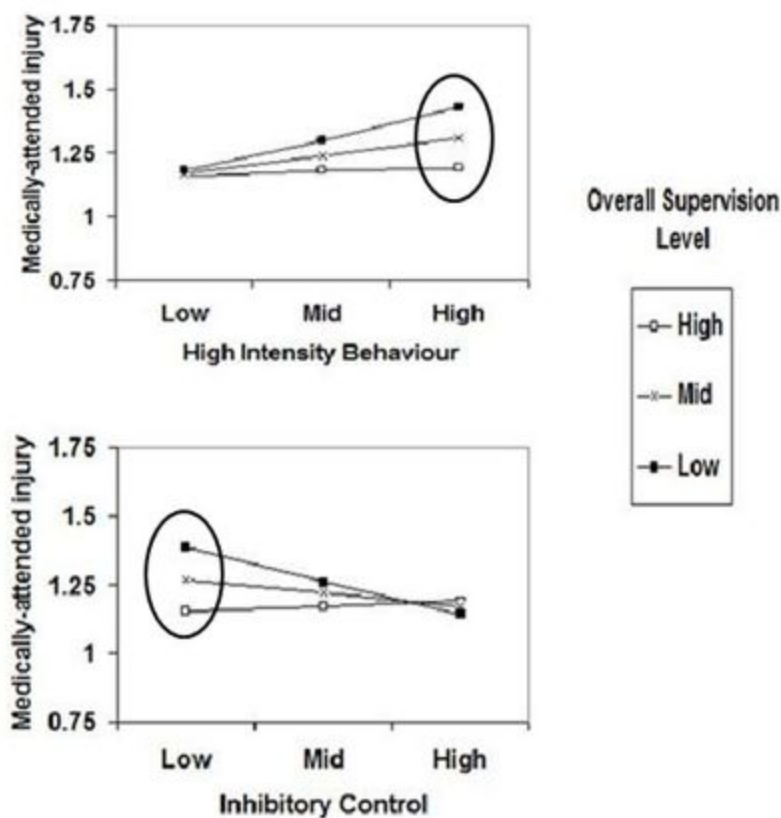


Figure 1. Supervision moderates the relation between child behaviour characteristics and injury. For High Intensity Behaviour, high scores predicted injury when parents showed low and moderate levels of supervision ($p < .05$) but not when they showed high levels of supervision. A similar pattern of significant differences was found for low scores in Inhibitory Control.

At time points when children acquire new developmental milestones (e.g., start to walk), which often occurs unexpectedly for parents, injury rates show temporary peaks.²⁷ Thus, when children behave unpredictably and parents have not had sufficient time to adjust the level of supervision those children need in order to ensure their safety, then children more frequently get injured, especially at younger ages and in high-hazard contexts like farms.²⁸

Studies of young children have documented that lax supervision is associated with greater risk taking, more medically-attended injuries, and more severe injuries.²⁹ Moreover, particular patterns of supervision differentially relate to frequency of injury, highlighting the importance of closely supervising children, particularly boys.¹⁴ As shown in Figure 2, injury rates for boys and girls differed significantly when mothers used the strategy of intermittently going to check on the child, with boys experiencing more injuries than girls. In fact, injury rates for boys when

mothers intermittently listened in were as high as when mothers left their sons unsupervised, and rates for girls were as low as when mothers provided direct and close supervision; just the threat that a parent might appear to check on what the child was doing was sufficient to deter girls from taking risks, but not boys. Hence, anything less than constant watchful supervision was associated with high injury rates among boys. Generally, the research has shown that boys engage in more risk taking than girls and they are less compliant with parent requests to avoid hazards. Hence, boys require more frequent and effortful supervision practices than girls to ensure their safety.^{14,16}

Proportions of injuries occurring to boys and girls as a function of level of supervision

Figure 2. Proportion of injuries for boys (n = 428 total) and girls (n = 137 total) as a function of supervision pattern.

Sibling supervision in which an older child in the family (e.g., 5-12 years) looks after a younger one (e.g., < 5 years) occurs often when children are at home together.³⁰ This supervision arrangement elevates risk of injury for young children compared to parent supervision.^{31,32} Research examining the supervisory practices of older siblings compared with mothers revealed that supervisees were allowed to engage in more risk behaviours when supervised by older siblings than by mothers.³³ Moreover, the behaviours of both the sibling supervisors (i.e., less effective supervision) and young supervisees (i.e., non-compliant) contribute to increase risk of injury to the young child.^{34,35} Importantly, a rigorous evaluation of an online training program (Safe Sibs) reveals that siblings can learn to be more effective supervisors when given the proper resources and practice experiences.³⁶

Research Gaps

Most research examining supervision and its impact on injury risk has focused on mothers, but fathers also often supervise young children at home. A few studies have compared mothers' with fathers' beliefs about the need for supervision of their young children³⁷ and reactions to their toddler's risk taking behaviours³⁸ and found no differences, however, more extensive research is needed. It might be, for example, that differences in supervision between mothers and fathers vary depending on a child's developmental level or behavioural attributes.

Surprisingly, despite how often supervision is mentioned as a risk factor for injury in the pediatric literature, there is only one proven effective intervention program that addresses parent supervision. The Supervising for Home Safety program incorporates a number of

messaging approaches that were shown to be effective to change parental beliefs about injuries and supervision.³⁹ The program has proven effective when delivered in a 1:1 format (e.g., home visiting programs) or a parenting group context.^{40,41} Extending this program to meet the needs of high-risk parent populations is an important next step because in the child maltreatment area inadequate supervision is a cornerstone in defining neglectful parenting.^{42,43} Hence, interventions that can improve supervision behaviours for parents showing supervisory neglect are sorely needed.

Conclusions

Developments in defining and measuring supervision have paved the way for research on caregiver supervision, including studying how this factor influences young children's risk of injury. Research has confirmed past speculation that poor supervision can elevate risk of injury to children, but the findings also highlight variation in this process depending on parent and child characteristics, as well as level of environmental risk. The evidence indicates that mothers and fathers are more similar than different in supervising young children and that sibling supervision is more lax than parent practices which contributes to elevated injury risk for young supervisees when supervised by older siblings.

Implications

An important aspect of raising young children is preventing unintentional injuries. Supervision is a strategy that has been shown to achieve this goal. The supervision needs of children, however, are influenced by a multitude of factors, including child characteristics (age, sex, behavioural attributes), parent characteristics (conscientiousness, beliefs about injuries) and level of environmental risk. Such complexity suggests that it may not be realistic to aim to develop specific 'supervision guidelines' that can apply broadly. Developing interventions that target caregiver supervision beliefs and behaviours and can be broadly applied, therefore, is essential. The Supervising for Home Safety program meets this need and the focus now has to be on program dissemination to counteract parents' commonly held belief that childhood injuries are 'accidents' and to enhance their motivation for and self-efficacy beliefs that they can more closely supervise their children.⁴⁴ In addition, the Safe Sibs program can address the need to train children to be more effective supervisors of younger children. This is essential given that supervision by siblings is a common occurrence and without training these older siblings increase risk of injury to younger children.

References

1. Dershewitz RA, Williamson JW. Prevention of childhood household injuries: A controlled clinical trial. *American Journal of Public Health* 1977;67(12):1148-1153.
2. Gallagher SS, Hunter P, Guyer B. A home injury prevention program for children. *Pediatric Clinics of North America* 1985;32(1):95-112.
3. Gielen AC, McDonald EM, Wilson ME, Hwang WT, Serwint JR, Andrews JS, Wang MC. Effects of improved access to safety counseling, products, and home visits on parents' safety practices: Results of a randomized trial. *Archives of Pediatrics and Adolescent Medicine* 2002;156(1):33-40.
4. Kendrick D, Barlow J, Hampshire A, Stewart-Brown S, Polnay L. Parenting interventions and the prevention of unintentional injuries in childhood: Systematic review and meta-analysis. *Child: Care, Health, and Development* 2008;34(5):682-695.
5. Towner E, Dowswell T, Mackereth C, Jarvis S. *What works in preventing unintentional injuries in children and young adolescents? An updated systematic review*. London, UK: National Institute for Health and Clinical Excellence; 2001.
6. Morrongiello BA, Kiriakou S. Mothers' home-safety practices for preventing six types of childhood injuries: What do they do, and why? *Journal of Pediatric Psychology* 2004;29(4):285-297.
7. Morrongiello BA. Caregiver supervision and child-injury risk: I. Issues in defining and measuring supervision; II. Findings and directions for future research. *Journal of Pediatric Psychology* 2005;30(7):536-552.
8. Gitanjali S, Brenner R, Morrongiello BA, Haynie D, Rivera M, Cheng T. The role of supervision in child injury risk: Definition, conceptual, and measurement issues. *Journal of Injury Control & Safety Promotion* 2004;11(1):17-22.
9. Rivera FP. Developmental and behavioral issues in childhood injury prevention. *Journal of Developmental and Behavioral Pediatrics* 1995;16(5):362-370.
10. Shannon A, Brashaw B, Lewis J, Feldman W. Nonfatal childhood injuries: A survey at the Children's Hospital of Eastern Ontario. *Canadian Medical Association Journal* 1992;146(3): 361-365.
11. Pollack-Nelson C, Drago DA. Supervision of children aged two through six years. *Injury Control and Safety Promotion*. 2002;9(2):121-126
12. Simon HK, Tamura T, Colton K. Reported level of supervision of young children while in the bathtub. *Ambulatory Pediatrics* 2003;3(2):106-108.
13. Garling A, Garling T. Mothers' supervision and perception of young children's risk of injury in the home. *Journal of Pediatric Psychology* 1993;18(1):105-114.
14. Morrongiello BA, Ondejko L, Littlejohn A. Understanding toddlers' in-home injuries: II. Examining parental strategies and their efficacy for managing child injury risk. *Journal of Pediatric Psychology* 2004;29(6):433-446.
15. Peterson L, DiLillo D, Lewis T, Sher K. Improvement in quantity and quality of prevention measurement of toddler injuries and parental interventions. *Behavior Therapy* 2002;33(2):271-297.
16. Morrongiello BA, Dawber T. Toddlers' and mothers' behaviors in an injury-risk situation: Implications for sex differences in childhood injuries. *Journal of Applied Developmental Psychology* 1998;19(4):625-639.
17. Cataldo MF, Finney JW, Richman GS, Riley AW, Hook RJ, Brophy CJ, Nau PA. Behaviors of injured and uninjured children and their parents in a simulated hazardous setting. *Journal of Pediatric Psychology* 1992;17(1):73-80.
18. Morrongiello BA, Corbett M, McCourt M, Johnston N. Understanding unintentional injury-risk in young children I. The nature and scope of caregiver supervision of children at home. *Journal of Pediatric Psychology* 2006;31(6):529-539.

19. Morrongiello BA, Corbett M, McCourt M, Johnston N. Understanding unintentional injury risk in young children II. The contribution of caregiver supervision, child attributes, and parent attributes. *Journal of Pediatric Psychology* 2006;31(6):540-551.
20. Morrongiello BA, Midgett C, Shields R. Don't run with scissors: Young children's knowledge of home safety rules. *Journal of Pediatric Psychology* 2001;26(2):105-115.
21. Morrongiello BA, Rennie H. Why do boys engage in more risk-taking than girls? The role of attributions, beliefs, and risk-appraisals. *Journal of Pediatric Psychology* 1998;23(1):33-43.
22. Rivera FP, Bergman AB, LoGerfo JP, Weiss NS. Epidemiology of childhood injuries. II. Sex differences in injury rates. *American Journal of Diseases of Children* 1982;136(2):502-506.
23. Morrongiello BA, Klemencic N, Corbett M. Interactions between child behavior patterns and parent supervision: Implications for children's risk of unintentional injury. *Child Development* 2008;79(3):627-638.
24. Schwebel DC, Brezaussek CM, Ramey SL, Ramey CT. Interactions between child behavior patterns and parenting: Implications for children's unintentional injury risk. *Journal of Pediatric Psychology* 2004;29(2):93-104.
25. Schwebel DC, Speltz M, Jones K, Bardina P. Unintentional injury in preschool boys with and without early onset of disruptive . *Journal of Pediatric Psychology* 2002;27(8):727-737.
26. Morrongiello BA. The role of supervision in child-injury risk: Assumptions, issues, findings, and future directions. *Journal of Pediatric Psychology* 2005;30:S36-S52.
27. Agran P, Winn D, Anderson C, Trent R, Walton-Haynes L, Thayer S. Rates of pediatric injuries by 3-month intervals for children 0 to 3 years of age. *Pediatric* 2003;111(6 Pt 1):683-692.
28. Morrongiello BA, Pickett W, Berg RL, Linneman JG, Brison RJ, Marlenga B. Adult supervision and pediatric injuries in the agricultural worksite. *Accident Analysis and Prevention* 2008;40(3):1149-1156.
29. Morrongiello BA, Corbett M, Brison RJ. Identifying predictors of medically-attended injuries to young children: Do child and parent attributes matter? *Injury Prevention* 2009;15(4):50-55.
30. Morrongiello BA, Walpole B, McArthur BA. Brief Report: Young children's risk of unintentional injury: A comparison of mothers' and fathers' supervision beliefs and reported practices. *Journal of Pediatric Psychology* 2009;34(10):1063-1068.
31. Morrongiello BA, Dawber T. Parental influences on toddlers' injury-risk behaviors: Are sons and daughters socialized differently? *Journal of Applied Developmental Psychology* 1999;20(2):227-251.
32. Morrongiello BA, MacIsaac T, Klemencic N. Older siblings as supervisors: Does this influence young children's risk of unintentional injury? *Social Science & Medicine* 2007;64(4):807-817.
33. Nathans AB, Neff M, Goss CH, Maier RV, Rivara FP. Effect of an older sibling and birth interval on the risk of childhood injury. *Injury Prevention* 2000;6(3):219-222.
34. Rauchschiwalbe R, Brenner RA, Smith GS. The role of bathtub seats and rings in infant drowning deaths. *Pediatrics* 1997;100(4):E1.
35. Morrongiello BA, Schmidt S, Schell S. Caregiver supervision and injury risk: A comparison of mothers' and older siblings' reactions to risk taking by a younger child member of the family. *Social Science and Medicine* 2010; 71: 958-965.
36. Morrongiello BA, Schell S, Schmidt S. "Please keep an eye on your younger sister": Sibling supervision and young children's risk of injury. *Injury Prevention* 2011; 16:398-402.
37. Morrongiello BA, Schell S. "You have to listen to me because I'm in charge": explicit instruction improves sibling supervision. *Journal of Pediatric Psychology* 2013; 38:342-350.
38. Schell S, Morrongiello BA. Can older siblings learn to be better supervisors? An RCT evaluating the effectiveness of Safe Sibs- on online training program to improve children's supervision knowledge and behavior. *Journal of Pediatric*

Psychology 2015; 40:756-767.

39. Morrongiello BA, Zdzieborski D, Sandomierski M, Lasenby-Lessard J. Video messaging: What works to persuade mothers to supervise young children more closely in order to reduce injuries? *Social Science & Medicine* 2009;68(6):1030-1037.
40. Morrongiello BA, Zdzieborski D, Sandomierski M, Munroe K. A randomized controlled trial (RCT) evaluating the efficacy of the Supervising for Home Safety Program: Impact on mothers' supervision practices. *Accident Analysis & Prevention* 2013; 50:587-595.
41. Morrongiello BA, Hou S, Bell M, Walton K, Fillion A, Haines, J. Supervising for Home Safety program: A randomized controlled trial testing community-based group delivery. *Journal of Pediatric Psychology* 2017; 42: 768-778.
42. Budd KS, Holdsworth MJ. Issues in clinical assessment of minimal parenting competence. *Journal of Clinical Child Psychology* 1996;25(1):2-14.
43. Coohey C. Defining and classifying supervisory neglect. *Child Maltreatment* 2003;8(2):145-156.
44. Morrongiello BA, Dayler L. A community-based study of parents' knowledge, attitudes and beliefs related to childhood injuries. *Canadian Journal of Public Health* 1996;87(6):383-388.

Parent-Child Relationships in Early Childhood and Development of Anxiety & Depression

Jennifer L. Hudson, PhD

Centre for Emotional Health, Department of Psychology, Macquarie University, Australia

December 2014, 2e éd.

Introduction

Parents play a substantial role in shaping children's emotional health, particularly in early childhood.¹ To better understand the impact of the parent-child relationship on the development of anxiety and depression in young children, research has focused on three main constructs 1) the degree to which a parent may be overprotective and/or critical, 2) parental modelling of anxiety and 3) the security of the child's attachment to his or her caregivers.

Subject

One of the key factors involved in the maintenance of anxiety disorders is the degree to which the child avoids feared situations. Parenting behaviours, such as overprotection, that serve to accommodate or enhance avoidant strategies are likely to impact on the maintenance and development of anxiety disorders.² Overprotective and overinvolved parenting is likely to lead to reduced opportunities for the child to approach new and potentially fearful situations. By reducing these opportunities, it is theorised that the child is less able to habituate to the perceived threat in these situations, less able to learn to accurately detect threat in new situations and less likely to learn they can cope with difficult situations. Another parenting style that has received attention with respect to the development of emotional health problems is critical parenting. Critical parenting has been consistently associated with depression and, to a lesser extent, anxiety.³⁻⁵ It is hypothesized that parents who criticise and minimise the child's feelings, undermine the child's emotion regulation and increase their sensitivity to emotional health problems such as anxiety and depression.

Parental modelling of fearful behaviour and avoidant strategies is also likely to increase a child's risk of developing later emotional health problems.⁶ An anxious parent may be more likely to model anxious behaviour or may provide threat and avoidant information to their child, increasing the child's risk of anxiety disorder. It is theorised that the impact of an anxious

parent, as well as an overprotective and critical parent, may be exacerbated in the context of a child with an inhibited temperament.²

Finally, an insecure parent-child attachment has also been identified as a risk factor for the development of anxiety disorders.⁷ Attachment is defined as the intimate emotional bond that forms between a child and caregiver and different patterns of attachment have been identified.⁸ An insecure, in contrast to a secure, attachment is one in which the child experiences the caregiver as unpredictable or does not experience comfort from the relationship. Attachment theorists propose that an insecure attachment occurs when the caregiver is unresponsive and insensitive to the child's needs. It is an insecure attachment that has been associated with anxiety and depression.^{7,9-11} It has been proposed that children with an insecure attachment are not able to develop adequate emotion regulation skills or a positive sense of self.

Problems

A significant problem arising in this area of study is the accurate assessment of the parent-child relationship. Early research examining overprotective and critical parenting focused on retrospective reports from adults with anxiety and depression, leading to potentially biased reports.¹² More recently, researchers have used observational methods to assess parental overprotection and negativity.¹³ Observational methods however, are not without problems, as parents may behave more positively when being observed in a research laboratory or at home.

Research Context

The majority of studies examining the relation between parenting behaviour and emotional disorders are cross-sectional in design thus limiting their ability to test causality. A few longitudinal studies, along with a small number of experimental studies, have recently emerged allowing an improved estimate of the causal impact of parenting behaviour on emotional health. The majority of this research focuses on school-aged children with few studies investigating parent interactions with younger children.

Key Research Questions

1. What parenting behaviours are associated with anxiety and depression in early childhood?
2. Is there a causal relationship between parenting behaviours and anxiety and depression in early childhood?

3. Is the impact of parenting behaviours greater for children with an inhibited temperament? In other words, do these parenting behaviours increase the risk of emotional health problems in all children or only in children already at risk for anxiety (e.g., inhibited children)?

Recent Research Results

Longitudinal studies have recently emerged showing that overprotective parenting in early childhood is associated with later anxiety disorders.¹⁴ For example, Hudson and Dodd¹⁵ followed a group of inhibited and uninhibited children from the age of 4 years. In this study, children's anxiety at age 9 was predicted by the child's anxiety and inhibition at age 4 but also by the mother's anxiety and the mother's overprotective behaviour: Greater maternal anxiety and maternal over-involvement predicted greater child anxiety. This finding has also been demonstrated in a number of other studies. In this study, the security of a child's attachment and maternal negativity did not predict later anxiety. Although these findings provide support for the relation between parenting and later psychopathology, these effects are only likely to be small. In support of this, a meta-analysis reported that overall parenting accounts for 4% of variance in anxiety in school aged children and 8% in child depression.⁵

Although theoretical models propose that parenting behaviours should interact with a child's temperament to increase risk, there has been minimal support for this type of interaction. Instead, the findings to date suggest that this relationship may in fact be additive, that is, the parenting behaviour may increase risk for all children not just children with an inhibited temperament.¹⁵ In contrast, Rubin and colleagues¹⁶ showed that mother's observed intrusive behaviour and derisive comments moderated the relation between toddler inhibited temperament and social reticence at preschool.

With regards to parental modelling, there have been a number of studies demonstrating that parent anxiety can be transmitted through modelling and verbal transmission of threat and avoidant information.^{17,18} In one experimental study, young infants showed increased fearfulness and avoidance of a stranger following exposure to a socially-anxious mother-stranger interaction.¹⁹ In this study, the effect was stronger for children with an inhibited temperament.

Research Gaps

The majority of research to date has focused almost exclusively on mothers. Knowledge about the role of fathers in the development of anxiety and depression in early childhood is limited. Fathers may in fact play a unique role in preventing the development of emotional health problems through encouraging risk-taking and encouraging 'rough and tumble' play. Further research investigating the role of fathers is needed.

Although some longitudinal research has emerged, further research is needed to assess the causal role of these parenting behaviours in the development of emotional health problems as well as the possible interactions between temperament and parenting. One of the difficulties of research examining the transmission of anxiety from parent to child is to examine the impact of parenting or parental modelling independent of the influence of shared genes.

Conclusions

Parenting has a small but significant impact on the development of anxiety and depression in young children. The most consistent evidence for this relationship has come from research examining maternal overprotection and child anxiety. Research has demonstrated a clear link between maternal overprotection and anxiety disorders in young children. Evidence for the causal nature of this relationship has started to emerge but further research is still needed to better understand the intricacies of this relationship and, particularly, its bidirectional nature. Theories propose that certain parenting behaviours should have a greater impact in the presence of an inhibited child but the empirical evidence for this has yet to be convincing.

Another body of research has demonstrated that parents can have an impact on their child through modelling anxiety. The degree to which a parent behaves in an anxious manner by either showing fearful or avoidant behaviours or by communicating threat to the child has been shown empirically, in a number of experimental studies, to impact on subsequent child emotion and behaviour. Longitudinal research which shows the impact of this modelling, over and above the influence of shared genes is needed.

The security of a child's attachment with their parent has been linked to later psychopathology. Given the overlap with other constructs (such as the child's temperament, other parenting behaviours) the degree to which attachment independently predicts child outcome is uncertain.

Implications for Parents, Services and Policy

Understanding which parenting behaviours increase a child's risk for later emotional health problems has direct implications for early intervention. The findings to date suggest that reducing overprotective parenting and reducing parent anxiety (and hence anxious modelling and verbal transmission of threat and avoidance) would be important in preventing later emotional health problems. Theoretical models predict that parenting strategies should be aimed at parents of inhibited children, however empirical evidence has yet to fully support this notion and would suggest that all parents should be taught to use strategies to increase a child's autonomy (rather than overprotective strategies). Still, there remains an argument for specifically targeting parents of at-risk children. With risk being so far identified as additive (rather than multiplicative), overprotective parenting increases an inhibited child's already high-risk status. For a child who is uninhibited, the increased risk conferred by an overinvolved parent may be inconsequential. Thus, targeting parents of inhibited preschool children may prove to be a more beneficial approach.

References

1. Gar NS, Hudson JL, Rapee RM. *Family Factors and the Development of Anxiety Disorders. Psychopathology and the family*. New York, NY: Elsevier Science; US; 2005:125-145.
2. Hudson JL, Rapee RM. From Temperament to Disorder: An Etiological Model of Generalized Anxiety Disorder. In: Heimberg RG, Turk CC, Menin DS, eds. *Generalized Anxiety Disorder: Advances in Research and Practice*. New York: Guildford Press; 2004.
3. Wood JJ, McLeod BD, Sigman M, Hwang W-C, Chu BC. Parenting and childhood anxiety: Theory, empirical findings, and future directions. *Journal of Child Psychology and Psychiatry*. Jan 2003;44(1):134-151.
4. McLeod BD, Wood JJ, Weisz JR. Examining the association between parenting and childhood anxiety: A meta-analysis. *Clinical Psychology Review* Vol 27(2) Mar 2007, 155-172; 2007.
5. McLeod BD, Weisz JR, Wood JJ. Examining the association between parenting and childhood depression: A meta-analysis. *Clinical Psychology Review*. Dec 2007;27(8):986-1003.
6. Rapee R. Family Factors in the Development and Management of Anxiety Disorders. *Clin Child Fam Psychol Rev*. 2012/03/01 2012;15(1):69-80.
7. Warren SL, Huston L, Egeland B, Sroufe L. Child and adolescent anxiety disorders and early attachment. *Journal of the American Academy of Child & Adolescent Psychiatry*. May 1997;36(5):637-644.
8. Ainsworth MDS, Blehar MC, Waters E, Wall S. *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum; 1978.
9. Shamir-Essakow G, Ungerer JA, Rapee RM. Attachment, Behavioral Inhibition, and Anxiety in Preschool Children. *Journal of Abnormal Child Psychology*. 2005;33(2):131-143.
10. Bogels SM, Brechman-Toussaint ML. Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review*. Nov 2006;26(7):834-856.
11. Muris P, Mayer B, Meesters C. Self-reported attachment style, anxiety, and depression in children. *Social Behavior & Personality*. 2000;28(2):157-162.

12. Rapee RM. Potential role of childrearing practices in the development of anxiety and depression. *Clinical Psychology Review*. 1997;17(1):47-67.
13. Hudson JL, Rapee RM. Parent-child interactions and anxiety disorders: An observational study. *Behaviour Research and Therapy*. Dec 2001;39(12):1411-1427.
14. Edwards SL, Rapee RM, Kennedy S. Prediction of anxiety symptoms in preschool-aged children: examination of maternal and paternal perspectives. *Journal of Child Psychology and Psychiatry*. 2010;51(3):313-321.
15. Hudson JL, Dodd HF. Informing Early Intervention: Preschool Predictors of Anxiety Disorders in Middle Childhood. *PLoS ONE*. 2012;7(8):e42359.
16. Rubin KH, Burgess KB, Hastings PD. Stability and Social-Behavioral consequences of toddlers' inhibited temperament and parenting behaviors. *Child Development*, 2002; 73 (2): 483-495.
17. Field A, Lawson J. Fear information and the development of fears during childhood: Effects on implicit fear responses and behavioural avoidance. *Behaviour Research and Therapy*. Nov 2003;41(11):1277-1293.
18. Gerull FC, Rapee RM. Mother knows best: The effects of maternal modelling on the acquisition of fear and avoidance behaviour in toddlers. *Behaviour Research & Therapy*. Mar 2002;40(3):279-287.
19. de Rosnay M, Cooper PJ, Tsigaras N, Murray L. Transmission of social anxiety from mother to infant: An experimental study using a social referencing paradigm. *Behaviour Research and Therapy*. 2006;44(8):1165-1175.

Parent Management Training Interventions for Preschool-Age Children

Robert J. McMahon, PhD

Simon Fraser University and Child & Family Research Institute, Canada

March 2015, 3e éd. rév.

Introduction

There is a substantial and growing body of evidence concerning the important role that familial risk factors play in facilitating young children's entry and progression along the "early-starter" pathway of conduct problems. This pathway is characterized by three elements: the onset of conduct problems (such as developmentally excessive levels of aggression, noncompliance, and other oppositional behaviour) in the preschool and early school-age years; a high degree of continuity throughout childhood and into adolescence and adulthood; and a poor prognosis.^{1,2} The most comprehensive family-based formulation for the early-starter pathway has been the coercion model developed by Patterson and his colleagues.^{3,4} The model describes a process of "basic training" in conduct-problem behaviours that occurs in the context of an escalating cycle of coercive parent-child interactions in the home, beginning prior to school entry. The proximal cause for entry into the coercive cycle is thought to be ineffective parental management strategies, particularly in regard to child compliance with parental directives during the preschool period. Types of parenting practices that have been closely associated with the development of child conduct problems include inconsistent discipline, irritable explosive discipline, low supervision and involvement, and inflexible rigid discipline.⁵ As this process of ineffective parent management continues over long periods, significant increases in the rate and intensity of child coercive behaviours occur as family members are reinforced by engaging in aggressive behaviours. Coercive interactions with siblings can also play a role in the development and maintenance of conduct problems.⁶ Other family risk factors that may have direct or indirect effects on parenting practices include maladaptive social cognitions, personal (e.g., antisocial behaviour, substance use, maternal depression) and interparental (e.g., marital problems) distress, and greater social isolation (e.g., insularity).^{1,7}

Subject

Parent Management Training (PMT) can be defined as an approach to treating child behaviour problems by using “procedures in which parents are trained to alter their child’s behavior in the home. The parents meet with a therapist or trainer who teaches them to use specific procedures to alter interactions with their child, to promote prosocial behavior, and to decrease deviant behavior.”⁸ PMT has been applied to a broad array of child problems and populations, but it has been primarily employed in the treatment of preadolescent (i.e., preschool- to school-age) children who exhibit overt conduct-problem behaviours such as temper tantrums, aggression, and excessive noncompliance, and it is in this area that PMT has the greatest empirical support. This article will focus on PMT interventions for preschool-age (three to five years old) children who engage in excessive levels of overt conduct problems.

The underlying assumption of social learning-based PMT models is that some sort of parenting skills deficit has been at least partly responsible for the development and/or maintenance of the conduct-problem behaviours. The core elements of the PMT model include the following approaches: First, intervention is conducted primarily with the parents, with relatively less therapist-child contact. Second, therapists refocus parents’ attention away from conduct-problem behaviour toward prosocial goals. Third, the content of these programs typically includes instruction in the social learning principles underlying the parenting techniques. Parents are trained in defining, monitoring, and tracking child behaviour; in positive reinforcement procedures, including praise and other forms of positive parent attention and token or point systems; in extinction and mild punishment procedures, such as ignoring, response cost, and time out in lieu of physical punishment; in giving clear instructions or commands; and in problem solving. Finally, in the PMT approach, therapists make extensive use of didactic instruction, modelling, role playing, behavioural rehearsal, and structured homework exercises to promote effective parenting.⁸⁻¹⁰

Problems

Despite the increasing emphasis on the use of evidence-based practice in this area,^{11,12} the overwhelming majority of commercially available family-based interventions have never been evaluated in a systematic and rigorous manner. Yet these programs are widely used, and their numbers increase each year.

The picture is more positive with respect to social learning-based PMT interventions. However, although the short-term efficacy of PMT in producing changes in both parent and child

behaviours has been demonstrated repeatedly (see below), PMT is not effective with all families. First, as with other types of treatment for children, dropouts occur, with average rates approximating 28 percent.¹³ Second, for families that do stay engaged, PMT interventions have demonstrated their generalizability (e.g., to the home, over time, to other children in the family) and social validity (i.e., whether therapeutic changes are “clinically or socially important” for the client¹⁴) to varying degrees — some quite impressively, others to a moderate degree, and others not at all.¹²

Third, although there are some data about various child and family characteristics that predict outcome (e.g., socioeconomic disadvantage, severity of child behaviour, maternal adjustment problems, treatment barriers), there has been a relative dearth of attention paid to a) the actual processes of change that are induced by PMT and b) whether there are certain subgroups (e.g., based on child gender or minority status or family socioeconomic status) for whom PMT is more or less effective.¹⁵⁻¹⁷

Research Context

In the past 45 years, hundreds of studies focusing on PMT with children with conduct problems have appeared.^{10-12,15-18} Study designs have ranged from case descriptions, single-case designs, and simple pre- to post-treatment evaluations to large-scale, randomized controlled trials with various control and alternative treatment comparison conditions. In general, the methodological sophistication of many of these evaluations is quite high.^{7,11,15-16}

Key Research Questions

1. What is the evidence for the efficacy, generalization, and social validity of PMT interventions with young children?
2. What are the mechanisms by which changes in child behaviour are achieved?
3. Is PMT differentially efficacious a) for various subgroups of children, parents, or families and b) as a function of the form and type of the PMT intervention itself? If not, are subgroup-specific interventions needed to improve the intervention?
4. What is the best way to disseminate evidence-based PMT interventions to the broader community (locally and internationally) so that they are employed with reasonable fidelity but with allowance for necessary site-specific adaptations?

Research Results

Efficacy, generalization, and social validity

PMT interventions with preadolescent (including those age five years and younger) children have been the focus of the largest and most sophisticated body of intervention research with children with conduct problems, and present the most promising results. PMT interventions have been successfully utilized in the clinic and home settings, have been implemented with individual families or with groups of families, and have involved some or all of the instructional techniques listed above. Self-administered PMT interventions can be effective with certain families, although other families may require more intensive interventions.^{16,19} Immediate treatment outcome has been quantified by changes in parental behaviour (e.g., less directive, controlling, and critical, and more positive), child behaviour (e.g., less physically and verbally aggressive, more compliant, and less destructive), and parental perceptions of the children's adjustment, with effect sizes ranging from medium for parent behaviour and adjustment to medium to large for child behaviour.^{16,20-22} One meta-analytic study²³ found that teaching parents to interact positively with their children and requiring parents to practice with their child during treatment sessions were associated with more positive parenting and child outcomes. Emotion communication skills also were associated with positive parenting outcomes, and teaching parents to use time out correctly and to respond consistently to the child were associated with positive child outcomes. Recent reviews^{11,12} have identified a number of PMT interventions that have a strong evidence base for improving conduct-problem behaviour in preschool-age children, including Helping the Noncompliant Child,²⁴ the Incredible Years,²⁵ Parent-Child Interaction Therapy,²⁶ Parent Management Training-Oregon,²⁷ and Triple P (Positive Parenting Program).²⁸

Generalization of positive intervention effects to the home, over significant follow-up periods (up to 14 years post-treatment and longer), to untreated siblings, and to untreated behaviours has been demonstrated for many of these interventions as well. The social validity (e.g., consumer satisfaction, improvement to the normative range) of these effects has also been documented. For example, in their meta-analytic review of parent training, Serketich and Dumas²² reported that 17 of 19 intervention groups dropped below the clinical range after treatment on at least one measure, and 14 groups did so on all measures. Furthermore, the five PMT programs noted above have been positively evaluated in comparison with no-treatment, waiting-list, and/or attention-placebo control conditions, as well as with alternative family-based treatments²⁹ and available community mental health services.³⁰

Mechanisms

Changes in parenting behaviour have now been shown in several studies to mediate the effects of PMT with young children with conduct problems.¹⁵ This is a critical finding that goes to the core of PMT, as improvement in parenting behaviour is hypothesized to be the central mechanism by which change in child behaviour occurs. However, it is important to note that the majority of studies reviewed did not find support for parenting behaviour as a mediator.¹⁵

Moderation

In general, there has been a dearth of attention paid to the extent to which PMT may be differentially efficacious with different subgroups of children, parents, and families, or as a function of different aspects of PMT (e.g., treatment delivery mode). Candidates as possible moderators of efficacy include child characteristics such as severity of the child's conduct-problem behaviour, extent of comorbid problems (e.g., ADHD, anxiety/depression, callous-unemotional (CU) traits), age, gender, and minority status. Examples of parent and family characteristics that might serve as potential moderators include personal and marital adjustment, single-parent status, and family socioeconomic status. A meta-analytic study that examined moderators of PMT found that less severe child conduct problems, single-parent status, economic disadvantage (i.e., low socioeconomic status), and group-administered (as opposed to individually-administered) PMT resulted in poorer child behaviour outcomes in PMT.¹⁶ Interestingly, child age was not a significant moderator. Lundahl et al.¹⁶ reported that among disadvantaged families, individual PMT was associated with more positive child and parent behavioural outcomes than group PMT. Child gender does not appear to moderate PMT outcomes, although the research is limited.

One area of current research interest is the extent to which PMT is efficacious with a subgroup of children with early starting conduct problems who also display CU traits (or limited prosocial emotions in the DSM-5³¹). CU traits are characterized by a lack of regard for others' feelings, deficient guilt associated with wrongdoing, restricted emotionality, and a lack of concern about performance, and are associated with a significantly poorer prognosis than for other children with early starting conduct problems.³² Children with conduct problems and elevated levels of CU traits do not respond as well to traditional PMT interventions as do other children with conduct problems. In a recent review, CU traits were associated with poorer outcomes from PMT in 81% (9 of 11) of the studies.³³ However, it is also the case that these children do respond to PMT, but

to a lesser degree than other children. Furthermore, two studies have documented decreases in CU traits (in addition to decreases in conduct problems) as a function of PMT.^{34,35} It has been suggested that additional emphasis be placed on the promotion of parental warmth and positive reinforcement in PMT interventions with these children.³³

Effectiveness/dissemination

Large-scale effectiveness trials of PMT as well as cross-cultural dissemination studies are becoming increasingly more common. These research efforts provide essential information on transporting these interventions to real-world settings and the feasibility of utilizing PMT interventions with diverse populations. Michelson et al.³⁶ meta-analysis demonstrated that PMT worked when conducted in “real-world” settings, as indicated by a) clinic-referred samples, b) non-specialist therapists, c) routine settings, and d) as part of a routine service. Cross-cultural effectiveness trials of the Incredible Years, Triple P, and Parent Management Training-Oregon programs have been conducted in Europe, Asia, Australia, and North America.^{30,37-40} Triple P is currently being implemented in more than 20 countries.²⁸ Efforts to establish PMT in developing countries are also currently underway.⁴¹

Conclusions

A PMT approach to intervention for young children with conduct problems is arguably the intervention of choice, given the substantial empirical support for efficacy, generalization, and social validity. There is also increasing empirical support for the premise that change in parental behaviour is a key mechanism in producing child behaviour change. Meta-analytic research suggests that the efficacy of PMT for child behaviour change is less for economically disadvantaged and single-parent families and for children with CU traits; greater when administered to children with more severe conduct problems and to individual families rather than in groups; and is comparable in efficacy for boys and girls and for majority and minority samples. Large-scale effectiveness and dissemination trials, many of them in international settings, are providing important information concerning the feasibility of implementing PMT interventions in the real world.

Implications

As a first step, it is critical that policy-makers choose PMT programs that have an adequate empirical base. Reference to key reviews^{7,11,12} can be a useful starting point for the identification

of potential PMT interventions.

With respect to delivery systems, group-based PMT can be a cost-effective alternative to working with individual families in some instances, although PMT with individual families may be more efficacious, especially with economically disadvantaged families. In some cases, self-administered PMT may be sufficient. Guidelines for the selection of particular modes of PMT are needed.

Interest in interventions for the prevention of conduct problems has burgeoned over the past 25 years, stimulated partly by increased knowledge about the early-starter pathway of conduct problems. PMT may have significant preventive effects, especially if it is applied during the preschool period,⁴² or is a component of broader preventive interventions for school-age children at risk for conduct problems.^{43,44} An integrative review of 26 reviews and meta-analyses (1,075 studies) published between 1990 and 2008 found that PMT interventions had a larger effect size than either child focused or school/community based interventions ($d_s = .56, .41$, and $.28$, respectively).⁴⁵ If PMT can play a role in the prevention of conduct problems, that will have important implications for reducing the need for ongoing interventions throughout the developmental period and adulthood.

One of the more compelling reasons for the utilization of PMT on a large scale is its potential economic benefit. Children with early starting conduct problems are likely to incur significant economic consequences. It has been estimated that the potential value of saving a single youth from a criminal career ranges from \$3.2 to \$5.5 million.⁴⁶ The empirical support for PMT, the availability of manuals (which assists in standardized use and dissemination) for many PMT programs and multiple-level delivery systems, and its potential for preventive effects are all conducive to significant economic savings. When analyzed as part of a cost-benefit study conducted by the Washington State Institute of Public Policy,⁴⁷ benefit-to-cost ratios ranged from 1.20 to 5.63 for the Incredible Years, Parent-Child Interaction Therapy, and Triple P (i.e., for every dollar spent, savings ranged from \$1.20 to more than \$5).

Despite this very positive evaluation of PMT as an intervention for young children with conduct problems, there are a number of areas that warrant continued and increased attention. These include: a) development of treatment selection guidelines; b) continued emphasis on identification and elaboration of the processes of family engagement and change in PMT;⁴⁸ c) examination of strategies for enhancing outcome and generalization of effects, especially with

respect to underserved groups; d) the role of PMT as a preventive intervention; and e) greater attention to the conceptual, empirical, and pragmatic issues that are involved in large-scale dissemination.⁴⁹ Incorporating innovative technologies in the design, delivery, and enhancement of PMT (e.g., via the internet and smartphone apps) is particularly promising.⁵⁰

References

1. Kimonis E, Frick PJ, McMahon RJ. (2014). Conduct and oppositional defiant disorders. In: Mash EJ, Barkley RA, eds. *Child psychopathology*. 3rd ed. New York, NY: Guilford Press; 2014:145-179.
2. Moffitt TE. Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review* 1993;100(4):674-701.
3. Patterson GR. *Coercive family process*. Eugene, Ore: Castalia Publishing Company; 1982.
4. Patterson GR, Reid JB, Dishion TJ. *Antisocial boys*. Eugene, Ore: Castalia Publishing Company; 1992.
5. Chamberlain P, Reid JB, Ray J, Capaldi DM, Fisher P. Parent inadequate discipline (PID). In: Widiger TA, Frances AJ, Pincus HA, Ross R, First MB, Davis W, eds. *DSM-IV sourcebook. Vol. 3*. Washington, DC: American Psychiatric Association; 1997:569-629.
6. Feinberg ME, Solmeyer AR, McHale, SM. The third rail of family systems: Sibling relations, mental and behavioral health, and preventive intervention in childhood and adolescence. *Clinical Child and Family Psychology Review* 2012;15(x):43-57.
7. McMahon RJ, Wells KC, Kotler JS. Conduct problems. In: Mash EJ, Barkley RA, eds. *Treatment of childhood disorders*. 3rd ed. New York NY: Guilford Press.;2006:137-268.
8. Kazdin AE. *Conduct disorders in childhood and adolescence*. 2nd ed. Thousand Oaks, Calif: Sage Publications; 1995:82.
9. Dumas JE. Treating antisocial behavior in children: Child and family approaches. *Clinical Psychology Review* 1989;9(2):197-222.
10. Miller GE, Prinz RJ. Enhancement of social learning family interventions for childhood conduct disorder. *Psychological Bulletin* 1990;108(2):291-307.
11. Eyberg SM., Nelson MM, Boggs, SR. Evidence-based treatments for child and adolescent disruptive behavior disorders. *Journal of Clinical Child and Adolescent Psychology*, 2008;37(1):213-235.
12. McMahon RJ, Pasalich D. Family-based interventions for young children with conduct problems as a means of delinquency prevention. In: Craig WM, Pepler DJ, Cummings J, eds. *Creating healthy relationships to prevent bullying: Get the tools to take action (PREVNet Series, Volume V)*. Ottawa, ON: National Printers; In press.
13. Forehand R, Middlebrook J, Rogers TR, Steffe M. Dropping out of parent training. *Behaviour Research and Therapy* 1983;21(6):663-668.
14. Kazdin AE. Assessing the clinical or applied importance of behavior change through social validation. *Behavior Modification* 1977;1(4):427-452.
15. Forehand R, Lafko N, Parent J, Burt KB. Is parenting the mediator of change in behavioral parent training for externalizing problems of youth? *Clinical Psychology Review* 2014;34(8):608-619.
16. Lundahl B, Risser HJ, Lovejoy MC. A meta-analysis of parent training: Moderators and follow-up effects. *Clinical Psychology Review* 2006;26(1):86-104.
17. Reyno SM, McGrath PJ. Predictors of parent training efficacy for child externalizing behavior problems – A meta-analytic review. *Journal of Child Psychology and Psychiatry* 2006;47(1):99-111.

18. O'Dell SL. Training parents in behavior modification: A review. *Psychological Bulletin* 1974;81(7):418-433.
19. O'Brien M, Daley, D. Self-help parenting interventions for childhood behaviour disorders: A review of the evidence. *Child: Care, Health and Development* 2011;37(5):623-637.
20. Dretzke J, Davenport C, Frew E, Barlow J, Stewart-Brown S, Bayliss S, Taylor RS, Sandercock J, Hyde C. The clinical effectiveness of different parenting programmes for children with conduct problems: A systematic review of randomized controlled trials. *Child and Adolescent Psychiatry and Mental Health* 2009;3(7).
21. Maughan DR, Christiansen E., Jenson WR, Olympia D, Clark E. Behavioral parent training as a treatment for externalizing behaviors and disruptive behavior disorders: A meta-analysis. *School Psychology Review* 2005;34(3):267-286.
22. Serketich WJ, Dumas JE. The effectiveness of behavioral parent training to modify antisocial behavior in children: A meta-analysis. *Behavior Therapy* 1996;27(2):171-186.
23. Kaminski JW, Valle LA, Filene JH, Boyle CL. A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology* 2008;36(4):567-589.
24. McMahon RJ, Forehand RL. *Helping the noncompliant child: Family-based treatment for oppositional behavior*. 2nd ed. New York, NY: Guilford Press; 2003.
25. Webster-Stratton, C, Reid, JM. The Incredible Years parents, teachers, and children training series: A multifaceted treatment approach for young children with conduct disorders, In: Weisz JR, Kazdin AE, eds. *Evidence-based psychotherapies for children and adolescents*. 2nd ed. New York, NY: Guilford Press; 2010:194-210.
26. Zisser A, Eyberg, SM. Parent-Child Interaction Therapy and the treatment of disruptive behavior disorders. In: Weisz JR, Kazdin AE, eds. *Evidence-based psychotherapies for children and adolescents*. 2nd ed. New York, NY: Guilford Press; 2010:179-193.
27. Forgatch MS, Patterson, GR. Parent Management Training—Oregon model: An intervention for antisocial behavior in children and adolescents. In: Weisz JR, Kazdin AE, eds. *Evidence-based psychotherapies for children and adolescents*. 2nd ed. New York, NY: Guilford Press; 2010:159-178.
28. Sanders MR. Development, evaluation, and multinational dissemination of the Triple P-Positive Parenting Program. *Annual Review of Clinical Psychology* 2012;8:345-379.
29. Wells KC, Egan J. Social learning and systems family therapy for childhood oppositional disorder: Comparative treatment outcome. *Comprehensive Psychiatry* 1988;29(2):138-146.
30. Taylor TK, Schmidt F, Pepler D, Hodgins C. A comparison of eclectic treatment with Webster-Stratton's parents and children's series in a children's mental health center: A randomized controlled trial. *Behavior Therapy* 1998;29(2):221-240.
31. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders 5th ed. (DSM-5)*. Washington, DC: American Psychiatric Publishing; 2013.
32. Frick PJ, Ray JV, Thornton LC, Kahn RE. (2014). Can callous-unemotional traits enhance the understanding, diagnosis, and treatment of serious conduct problems in children and adolescents? A comprehensive review. *Psychological Bulletin* 2014;140(1):1-57.
33. Hawes DJ., Price MJ, Dadds MR. Callous-unemotional traits and the treatment of conduct problems in childhood and adolescence: A comprehensive review. *Clinical Child and Family Psychology Review* 2014;17(3):248-267.
34. McDonald R, Dodson MC, Rosenfield D, Jouriles EN. Effects of a parenting intervention on features of psychopathy in children. *Journal of Abnormal Child Psychology* 2011;39(7):1013-1023.
35. Somech LY, Elizur Y. Promoting self-regulation and cooperation in pre-kindergarten children with conduct problems: A randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry* 2012;51(4):412-422.

36. Michelson D, Davenport C, Dretzke J, Barlow J, Day C. Do evidence-based interventions work when tested in the “real world?” A systematic review and meta-analysis of parent management training for the treatment of child disruptive behavior. *Clinical Child and Family Psychology Review* 2013;16(1):18-34.
37. Scott S, Spender Q, Doolan M, Jacobs B, Aspland H. Multicentre controlled trial of parenting groups for childhood antisocial behaviour in clinical practice. *British Medical Journal* 2001;323(7306):194-197.
38. Leung C, Sanders MR, Leung S, Mak R, Lau J. An outcome evaluation of the implementation of the Triple P-Positive Parenting Program in Hong Kong. *Family Process* 2003;42(4):531-544.
39. Ogden T, Amlund Hagen K. Treatment effectiveness of parent management training in Norway: A randomized controlled trial of children with conduct problems. *Journal of Consulting and Clinical Psychology* 2008;76(4):607-621.
40. Zubrick SR, Ward KA, Silburn SR, Lawrence D, Williams AA, Blair E, Robertson D, Sanders MR. Prevention of child behavior problems through universal implementation of a group behavioral family intervention. *Prevention Science* 2005;6(4):287-304.
41. Mejia A, Calam, C, Sanders MR. A review of parenting programs in developing countries: Opportunities and challenges for preventing emotional and behavioral difficulties in children. *Clinical Child and Family Psychology Review* 2012;15(2):163-175.
42. Reid JB. Prevention of conduct disorder before and after school entry: Relating interventions to developmental findings. *Development and Psychopathology* 1993;5(1-2):243-262.
43. Conduct Problems Prevention Research Group. Impact of early intervention on psychopathology, crime, and well-being at age 25. *American Journal of Psychiatry* 2015;172(1):59-70.
44. Tremblay RE, Vitaro F, Bertrand L, LeBlanc M, Beauchesne H, Boileau H, David L. Parent and child training to prevent early onset of delinquency: The Montreal longitudinal-experimental study. In: McCord J, Tremblay RE, eds. *Preventing antisocial behavior: Interventions from birth through adolescence*. New York,
45. Beelmann A, Raabe T. The effects of preventing antisocial behavior and crime in childhood and adolescence: Results and implications of research reviews and meta-analyses. *European Journal of Developmental Science* 2009;3(3):260-281.
46. Cohen MA, Piquero AR. New evidence on the monetary value of saving a high risk youth. *Journal of Quantitative Criminology* 2009;25(1):25-49.
47. Lee S, Aos S, Drake E, Pennucci A, Miller M, Anderson L. Return on investment: Evidence-based options to improve statewide outcomes, April 2012 (Document No. 12-04-1201). 2012; Olympia: Washington State Institute for Public Policy.
48. Nock MK, Ferriter C. Parent management of attendance and adherence in child and adolescent therapy: A conceptual and empirical review. *Clinical Child and Family Psychology Review* 2005;8(2):149-166.
49. Turner KMT, Sanders MR. Dissemination of evidence-based parenting and family support strategies: Learning from the Triple P – Positive Parenting Program system approach. *Aggression and Violent Behavior* 2006;11(2):176-193.
50. Jones DJ, Forehand R, Cuellar J, Kincaid C, Parent J., Fenton N, Goodrum N. Harnessing innovative technologies to advance children’s mental health: Behavioral parent training as an example. *Clinical Psychology Review* 2013;33(2):241-252.

Social-Contextual Determinants of Parenting

Jay Belsky, PhD

University of California, Davis, USA

December 2014, Éd. rév.

Introduction

By tradition, students of socialization have directed their primary energies toward understanding processes whereby parents' child-rearing strategies and behaviours influence children's development. An abundance of mostly correlational (but some experimental) evidence underscores parenting practices that, in general, promote child well-being. In the infant-toddler years, these take the form of sensitive-responsiveness, which is known to foster attachment security,¹ and mutually-positive parent-child relations, which themselves promote child cooperation, compliance and conscience development.² In the preschool through adolescent years, authoritative (vs. neglectful) parenting that mixes high levels of warmth and acceptance with firm control and clear and consistent limit-setting fosters prosocial orientation, achievement striving, and positive peer relations.^{3,4,5} Across childhood and adolescence, then, parenting that treats the child as an individual, respecting developmentally-appropriate needs for autonomy, and which is not psychologically intrusive/manipulative or harshly coercive contributes to the development of the kinds of psychological and behavioural "outcomes" valued in the western world.

Research Question

The fact that not all parents engage in such generally growth-promoting child-rearing raises a fundamental question: Why do parents parent the way they do? Whereas the earliest work on this topic emphasized the socio-economic status of parents and the way in which (maltreating) parents were themselves reared, subsequent work, guided principally by Belsky's⁶ process model of the determinants of parenting, highlights social-contextual factors and forces that shape parenting.⁷ These include (a) attributes of children; (b) the developmental history of parents and their own psychological make-up; and (c) the broader social context in which parents and this relationship are embedded.

Research Results

Virtually all the work to be considered derives from correlational (and sometimes longitudinal) studies linking some putative determinant with some feature of parenting. As such, most of the work fails to account for the fact that parenting, like so much of behavioural functioning, is itself heritable.^{8,9} Thus, findings to be summarized linking social-contextual “determinants” and parenting “outcomes” illuminate potential causal processes rather than confirm them.

Characteristics of children

It has long been presumed that hard-to-manage, negatively emotional and demanding children are not only more likely to develop behaviour problems, especially of the externalizing variety, but do so because of the hostile-intrusive or even detached-uninvolved parenting they evoke. A number of investigations do link infant or child negativity/difficulty with less supportive, if not problematic parenting,^{10,11} and greater sensitive-responsiveness and warmth on the part of parents with greater positive emotionality,¹¹ prosocial behaviour^{12,13} and social competence¹⁴ on the part of children. Pike and associates¹⁵ found, in fact, that more negative, irritable or aggressive adolescents received more negative parenting even after accounting for heritability. Such results are in line with experiments manipulating negative child behaviour to investigate its causal effect on parenting.¹⁶ Such experimental efforts to document truly causal effects have not been undertaken with positive child behaviour. All this is not to say, however, that variation in parenting is exclusively – or even primarily – a function of child temperament/behaviour, only that it makes a contribution, especially when considered in the context of other sources of influence.⁷

Characteristics of parents

Research on the etiology of child maltreatment called attention to the role of child-rearing history in shaping parenting. What has become clear, however, is that the intergenerational transmission of parenting, whether maltreating or growth-promoting, is by no means inevitable.^{7,17,18} Nevertheless, in the main, both harsh^{19,20,21,22} and supportive parenting^{23,24,25} tend to be transmitted down generational lines, in the case of mothers, fathers or both.

Psychological attributes of parents also influence the way parents manage their children.²⁶ Indeed a meta-analysis of 30 studies focused on the Big 5 personality characteristics involving almost 6,000 parent-child dyads revealed that higher levels extraversion, agreeableness, conscientiousness and openness to experience and lower levels of neuroticism were related to greater warmth and behavioural control on the part of parents, whereas higher levels of

agreeableness and lower levels of neuroticism were related to the provision of more support for autonomy;²⁷ somewhat similar results emerged in a related meta-analysis that also examined the influence of parental psychological problems on parenting.²⁸

There is reason to believe that these personality characteristics shape parenting by influencing the emotions parents experience and/or the attributions they make about the causes of child behaviour (e.g., crying is caused by tiredness or by a desire to manipulate the parent).^{7,29} The possibility must be entertained, as well, that these processes are themselves a product of how parents were raised by their own parents.^{6,30}

The social context: marital/partner relationships

Evidence dating back to at least the 1930s linking troubled marriages and child behaviour problems led to the hypothesis that while some of the association between marital processes and child functioning is direct and unmediated via parenting,³¹ some of it derives from the effect of marriage on parenting.^{6,32,33,34}

One way in which marriages affect parenting involves emotions, be they positive or negative, spilling over from one relationship to affect the other,¹⁰ though compensatory mechanisms also seem to be at work in some families, with problems in the marriage fostering more sensitive and involved parenting.³⁵ In some cases this probably reflects efforts to protect the child from marital stress,³⁶ though in other cases it may reflect developmentally inappropriate enmeshment, whereby adults use the parent-child relationship to meet unmet emotional needs.³⁷ Anger in the marriage can also promote parental withdrawal,³⁸ something that children can perceive as rejection. But it is also the case that spousal withdrawal from partner conflict can engender hostile and intrusive parenting.^{38,39,40} The fact that marriage-parenting linkages are so varied probably explains why simple marriage-parenting correlations are not always as strong as might be expected.^{23,36}

Conclusion

Almost 25 years ago now Belsky⁶ argued that parenting is multiply determined by a variety of factors and forces and that weakness or strength in any one was unlikely to determine how parents behaved, as the positive contribution of the latter buffered the undermining effect of the former. Thus, what was most important to understanding why parents parented the way they did was the accumulation of stresses and supports or, in developmental-psychopathology terminology, risk and protective factors.⁴¹ Therefore, while the cited evidence calls attention to some of the social-contextual determinants of parenting, these need to be considered “in

context,” i.e. in the context of other determinants, only some of which have been discussed.

New theory and research also warns against over interpreting the findings summarized here and the general conclusions drawn regarding social-contextual forces shaping parental behaviour. And this is because differential-susceptibility theory, along with ever-emerging evidence consistent with it, stipulates that individuals vary in their susceptibility to environmental effects.

^{42,43,44} What this implies with regard to the determinants of parenting is that not all parents will prove equally affected by characteristics of their children and/or the marital/partner relationship—and so much more. Perhaps the most compelling evidence to this effect comes from Dutch research indicating that the anticipated effects of daily hassles on sensitive parenting was most pronounced in parents with a combination of genes leading to the least efficient dopaminergic system functioning (COMT val/val or val/met, DRD4-7Repeat). Indeed, and consistent with the differential-susceptibility hypothesis, more daily hassles were associated with less sensitive parenting, whereas lower levels of daily hassles were associated with more sensitive parenting, but only among such parents, not those who did not fit this genetic profile.⁴⁵ One implication of this observation and differential-susceptibility thinking more generally is that evidence cited highlighting effects of child behaviour and marital/partner relationships on parenting likely over- and under-estimates such effects, as it fails to take into consideration variation in susceptibility on the part of parents. Thus, the research over estimates effects in the case of those less susceptible and under estimates effects for those more susceptible, clearly implying that future work needs to consider variation in susceptibility to better illuminate the determinants of parenting.

Implications

The most important implication of the notion that parenting is multiply determined is that there should be no single way to promote growth-fostering parenting, especially among those who prove highly susceptible to the contextual regulation of their parenting. In some cases, the best way may be to promote marital relationships; in other cases, it may be to shape how parents think about the causes of child behaviour. And in still others, it may be to enable parents to better regulate their negative emotions. Of course, if it can be done well, there is no reason not to target multiple avenues of potential influence.

References

1. De Wolff MS, Van IJzendoorn MH. Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development* 1997;68(4):571-591.
2. Kochanska G, Forman DR, Aksan N, Dunbar SB. Pathways to conscience: Early mother-child mutually responsive orientation and children's moral emotion, conduct, and cognition. *Journal of Child Psychology and Psychiatry*

2005;46(1):19-34.

3. Ackerman BP, Brown ED, Izard CE. The relations between contextual risk, earned income, and the school adjustment of children from economically disadvantaged families. *Developmental Psychology* 2004;40(2):204-216.
4. NICHD Early Child Care Research Network. Early child care and children's development prior to school entry: Results from the NICHD Study of Early Child Care. *American Educational Research Journal* 2002;39(1):133-164.
5. Skinner E, Johnson S, Snyder T. Six dimensions of parenting: A motivational model. *Parenting: Science and Practice* 2005;5(2):175-235.
6. Belsky J. The determinants of parenting: A process model. *Child Development* 1984;55(1):83-96.
7. Belsky J, Jaffee S. The multiple determinants of parenting. In: Cicchetti D, Cohen D, eds. *Developmental psychopathology*. 2nd ed. New York, NY: Wiley; In press.
8. Spinath FM, O'Connor TG. A behavioral genetic study of the overlap between personality and parenting. *Journal of Personality* 2003;71(5):785-808.
9. Losoya SH, Callor S, Rowe DC, Goldsmith HH. Origins of familial similarity in parenting: A study of twins and adoptive siblings. *Developmental Psychology* 1997;33(6):1012-1023.
10. Goldberg WA, Clarke-Stewart KA, Rice JA, Dellis E. Emotional energy as an explanatory construct for fathers' engagement with their infants. *Parenting: Science and Practice* 2002;2(4):379-408.
11. McBride BA, Schoppe SJ, Rane TR. Child characteristics, parenting stress, and parental involvement: Fathers versus mothers. *Journal of Marriage and the Family* 2002;64(4):998-1011.
12. Carlo, G., Mestre, M. V., Samper, P., Tur, A., & Armenta, B. E. (2010). The longitudinal relations among dimensions of parenting styles, sympathy, prosocial moral reasoning, and prosocial behaviors. *International Journal of Behavioral Development*, 35 (2), 116-124.
13. Newton, E.K., Laible, D., Carlo, G., Steele, J.S. & MCGinley, M. (in press). Do sensitive parents foster kind children, or vice versa? Bidirectional influences between children's prosocial behavior and parental sensitivity. *Developmental Psychology*.
14. Barnett, M. A., Gustafsson, H. Deng, M., Mills-Koonce, W. R., & Cox, M. (2012). Bidirectional associations among sensitivity parenting, language development, and social competence. *Infant & Child Development*, 21, 374-393.
15. Pike A, McGuire S, Hetherington EM, Reiss D, Plomin R. Family environment and adolescent depressive symptoms and antisocial behavior: A multivariate genetic analysis. *Developmental Psychology* 1996;32(4):590-603.
16. Brunk MA, Henggeler SW. Child influences on adult controls: An experimental investigation. *Developmental Psychology* 1984;20(6):1074-1081.
17. Belsky, J., Conger, R., Capaldi, D.M. (2009). The Intergenerational Transmission of Parenting: Introduction to the Special Section. *Developmental Psychology*, 45,1201-1204.
18. Conger, R.D., Belsky, J., & Capaldi, D.M. (2009). The Intergenerational Transmission of Parenting: Closing Comments for the Special Section. *Developmental Psychology*, 45,1276-1283.
19. Capaldi DM, Pears KC, Patterson GR, Owen LD. Continuity of parenting practices across generations in an at-risk sample: A prospective comparison of direct and mediated associations. *Journal of Abnormal Child Psychology* 2003;31(2):127-142.
20. Conger RD, Neppl T, Kim KJ, Scaramella L. Angry and aggressive behavior across three generations: A prospective, longitudinal study of parents and children. *Journal of Abnormal Child Psychology* 2003;31(2):143-160.
21. Bailey, J.A., Hill, K.G., Oesterle, S., Hawkins, J.D. & The Social Development Research Group. (2009). Parenting practices and problem behavior across three generations. *Developmental Psychology*, 45, 1214-1226.

22. Neppl, T.K., Conger, R.D., Scaramella, L.V., & Ontai, L.L. (2009) Intergenerational continuity in parenting behavior. *Developmental Psychology*, 45, 1241-1256.
23. Belsky J, Fearon RMP. Exploring marriage-parenting typologies and their contextual antecedents and developmental sequelae. *Development and Psychopathology* 2004;16(3):501-523.
24. Chen ZY, Kaplan HB. Intergenerational transmission of constructive parenting. *Journal of Marriage and the Family* 2001;63(1):17-31.
25. Kerr, D.C.R., Capaldi, D.M., Pears, K.C., & Owen, L.D. (2009). A Prospective Three Generational Study of Fathers' Constructive Parenting: Influences from Family of Origin, Adolescent Adjustment, and Offspring Temperament. *Developmental Psychology*, 45, 1257-1275.
26. Belsky J, Barends N. Personality and parenting. In: Bornstein MH, ed. *Handbook of parenting: Being and becoming a parent*. Vol. 3. 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:415-438.
27. Prinzie, P., Stams, G.J., Dekovic, M., Reijntjes, A.H. & Belsky, J. (2009). The Relations Between Parents' Big Five Personality Factors and Parenting: A Meta-analytic Review. *Journal of Personality and Social Psychology*, 97, 351-362.
28. McCabe, J.E. (2014). Maternal personality and psychopathology as determinants of parenting behavior: A quantitative integration of two literatures. *Psychological Bulletin*, 140, 722-750.
29. Klausli, J.F. & Owen, M.T. (2011). Exploring actor and partner effects in associations between marriage and parenting for mothers and fathers. *Parenting: Science and Practice*, 11, 264-2011.
30. Bugental DB, Happaney K. Parental attributions. In: Bornstein MH. *Handbook of parenting: Being and becoming a parent*. Vol. 3. 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:509-535.
31. Serbin L, Karp J. Intergenerational studies of parenting and the transfer of risk from parent to child. *Current Directions in Psychological Science* 2003;12(4):138-142.
32. Wilson BJ, Gottman JM. Marital conflict, repair, and parenting. In: Bornstein MH, ed. *Handbook of parenting: Social conditions and applied parenting*. Vol.4. 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:227-258.
33. Belsky J. Early human experience: A family perspective. *Developmental Psychology* 1981;17(1):3-23.
34. Macfie, J., Houts, R. M., Pressel, A. S., & Cox, M. J. (2008). Pathways from infant exposure to marital conflict to parent-toddler role reversal. *Infant Mental Health Journal*, 29, 297-319.
35. Emery RE. Family violence. *American Psychologist* 1989;44(2):321-328.
36. Cox MJ, Paley B. Families as systems. *Annual Review of Psychology* 1997;48:243-267.
37. Grych JH. Marital relationships and parenting. In: Bornstein MH, ed. *Handbook of parenting: Social conditions and applied parenting*. Vol. 4. 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:203-225.
38. Margolin G, Oliver PH, Medina AM. Conceptual issues in understanding the relation between interparental conflict and child adjustment: Integrating developmental psychopathology and risk/resilience perspectives. In: Grych JH, Fincham FD, eds. *Interparental conflict and child development: Theory, research, and applications*. New York, NY: Cambridge University Press; 2001:9-38.
39. Lindahl KM, Malik NM. Observations of marital conflict and power: Relations with parenting in the triad. *Journal of Marriage and the Family* 1999;61(2):320-330.
40. Katz LF, Woodin EM. Hostility, hostile detachment, and conflict engagement in marriages: Effects on child and family functioning. *Child Development* 2002;73(2):636-652.
41. Cicchetti D, Toth SL. Perspectives on research and practice in developmental psychopathology. In: Sigel IE, Renninger KA, eds. *Handbook of child psychology: Child psychology in practice*. Vol.4. 5th ed. New York, NY: John Wiley and Sons; 1998:479-583.

42. Belsky, J. & Pluess, M. Beyond diathesis-stress: Differential susceptibility to environmental influences. *Psychological Bulletin*, 2009;135:885-908.
43. Belsky, J., & Pluess, M. Beyond risk, resilience and dysregulation: Phenotypic plasticity and human development. *Development and Psychopathology*, 2013;25:1243-1261.
44. Ellis, B.J., Boyce, W.T., Belsky, J., Bakermans-Kranenburg, M.J., & van Ijzendoorn, M.H. (2011). Differential Susceptibility to the Environment: A Neurodevelopmental Theory. *Development & Psychopathology* 2011;23:7-28.
45. van Ijzendoorn, M. H., Bakermans-Kranenburg, M. J., & Mesman, J. Dopamine system genes associated with parenting in the context of daily hassles. *Genes, Brain, and Behavior* 2008;7(4):403-410.

Parenting Programs and Their Impact on the Social and Emotional Development of Young Children

Daniel S. Shaw, PhD

University of Pittsburgh, USA

December 2014, 2e éd.

Introduction

Modifying parenting attitudes and behaviours has been a central focus of many programs designed to improve the social and emotional development of young children. The impetus for focusing on parenting is based on common sense and a large body of research demonstrating associations between parenting in early childhood and a number of later socio-emotional outcomes.^{1,2} Even before formal research studies were initiated on the effects of early socialization practices in relation to children's later psychosocial outcomes, many community-based programs focused on parenting because of young children's physical and psychological dependence on caregivers. This emphasis on parenting has been bolstered since the 1940s, when research on the effects of early parenting was formally initiated.^{3,4} Since then a plethora of studies, including those utilizing genetically informed designs, have found associations between caregiving behaviours in early childhood and later child outcomes.⁵ A number of parenting dimensions have been associated with various types of child adjustment. On the positive side, early caregiving characterized as sensitive, responsive, involved, proactive and providing structure has been associated with positive socio-emotional adjustment. Conversely, parenting in early childhood (from birth to five years) characterized as neglectful, harsh, distant, punitive, intrusive and reactive has been associated with various types of maladjustment. In general, parenting programs for young children have varied based on the theoretical orientation of the intervention model (e.g. social learning,⁶ attachment⁷), the developmental status of the child (e.g. prenatal, infancy, preschool-age), and the breadth of child behaviours targeted for intervention (e.g. externalizing problems, social and cognitive outcomes). Some programs are held with groups of parents,⁶ others work with individual parents and are typically home-based,⁸ while others incorporate parenting as part of a school- or daycare-based program.^{9,10}

Subject

In the last 20 years, parenting programs initiated in early childhood have been increasingly targeted at families whose children are at increased risk for poor social and emotional outcomes. During the prenatal and infant periods, families have been identified on the basis of socioeconomic risk (parental education, income, age^{8,11}) and/or other family (e.g. maternal depression) or child (e.g. prematurity and low birth weight¹²) risks; whereas with preschoolers a greater emphasis has been placed on the presence of child disruptive behaviour, delays in language/cognitive impairment and/or more pervasive developmental delays.⁶ With an increased emphasis on families from lower socioeconomic strata, who typically face multiple types of adversity (e.g. low parental educational attainment and work skills, poor housing, low social support, dangerous neighbourhoods), many parenting programs have incorporated components that provide support for parents' self-care (e.g. depression, birth-control planning), marital functioning and/or economic self-sufficiency (e.g. improving educational, occupational and housing resources).^{8,13,14} This trend to broaden the scope of "parenting" programs mirrors recent findings on early predictors of low-income children's social and emotional skills. For children living in poverty, although parenting has been shown to be a consistent predictor of later child functioning, other factors in the child's social environment have been found to contribute independent variance to children's adjustment, effects that are not accounted for by parenting.¹⁵ Such factors include parental age, well-being, history of antisocial behaviour, social support within and outside the family, and beginning around age three to four in Canada's most impoverished communities, neighbourhood quality.¹⁶

Challenges, Research Context and Key Research Questions

Although scores of parenting programs for young children have been and are currently being used in communities throughout North America, in only a relatively few cases has their long-term efficacy been tested using comparison groups, much less with a randomized control trial (RCT).^{17,18} Thus, drawing firm conclusions about their effectiveness in improving young children's social and emotional outcomes is limited to a few investigators who have used more rigorous methods. Even in cases where appropriate comparison groups have been utilized, there are a couple of important caveats worthy of mention. First, in studies in which parents are the sole informant on child outcomes following intervention, there is a potential for reporting bias, as parents might be more invested in the intervention condition and motivated to report improvements in child functioning than parents in control groups. Second, early studies that were limited to parenting per se and that did not address other issues in the child and his/her

ecology (e.g. child verbal skills, family's socioeconomic context and parental well-being) found rather modest effect sizes that tended to dissipate over time and across context (e.g. average effect sizes below .20, little long-term generalization to child behaviour at school¹⁹). Third, and related to parenting programs expanding to incorporate ecological factors (e.g. parental well-being, economic self-sufficiency), it is becoming increasingly difficult to unpack the effects of specific components of multifaceted interventions. While ideally it should remain a goal to identify and attribute changes in child behaviour to specific changes in parenting, this aim might become less realistic to achieve as more parenting programs apply a multisystemic perspective to targeting the multifaceted needs of families from high-risk environments.

Recent Research Results

Rather than provide a systematic and exhaustive review of the literature, the goal is to identify promising work and themes across studies that might lead to similar positive outcomes in future work. As noted earlier, because of the relative dearth of studies that have randomly assigned families to a family-based intervention, it is not a difficult task to pare down the number of methodologically elite projects. In terms of how the design of a study might compromise the credibility of its findings, it is important to note that effect sizes of parent support programs tend to be consistently higher for those studies using less rigorous designs (e.g. pre-post studies without control groups) and consistently lower for randomized studies.¹⁹ Despite these caveats, there are emerging themes that characterize many successful programs.

- **Specificity does matter.** Parenting programs that address specific types of child behaviour (e.g. developmental disabilities, child conduct problems) or target specific developmental transitions (e.g. becoming a parent, the “terrible twos”) seem to be more successful than those that treat a wide range of problem behaviours or a wide age range of young children.^{6,8,14}
- **Covering multiple domains.** Successful programs tend to emphasize parenting and factors that might compromise its functioning, including consistent caregiving in other contexts (e.g. preschool, daycare), and maternal well-being, the family's economic independence and marital quality.^{6,8,14}
- **Careful training of interventionists.** The most successful programs tend to devote enormous efforts to initial training of staff and maintenance of intervention fidelity over time.^{6,8} There is also some support for the use of professional staff over para-professionals,¹⁹

but some of this research is confounded by the quality of staff training in these studies (i.e. the studies that tend to use professionals also tend to have more intensive training and follow-up).

- **Interventionist's ability to engage parents.** Successful programs have developed ways to maximize parents' investment by emphasizing the importance of young children's development and linking it to parenting skills and parents making healthful decisions about their own well-being.^{6,8,14} In addition to covering multiple domains of family life, successful programs generally include repeated and intensive contact with parents ranging from several months to one or two years.

Two prime examples of successful programs with young children include the programmatic work of Olds and colleagues^{8,20,21} and Webster-Stratton.^{6,22} Despite differences in their theoretical emphasis, timing of the intervention (prenatal period and infancy versus preschool to early school age) and their structure (home-based, one-on-one contact versus meeting in a group format at a clinic), the two programs share the four commonalities described above. Olds' model engages mothers during pregnancy and immediately following the delivery of their infant to promote maternal health and quality of the infant-parent relationship. It has now been validated in RCTs with three large cohorts of children at heightened risk for maladaptive outcomes.^{8,20,21} While including a component to improve the quality of the mother-infant relationship (79% lower rate of child maltreatment in intervention vs. control group), the intervention also stresses changes in maternal health-related behaviours during pregnancy (i.e. smoking, drinking alcohol) and in health and lifestyle choices during the child's early years (e.g. 43% lower rates of subsequent pregnancy, 84% higher participation in work force). Group differences have been found in several domains at age 15, with youth in the intervention group demonstrating significantly fewer arrests and convictions than adolescent offspring in the control group. Results from an initial study conducted in rural New York have been followed up in Memphis and Denver, communities that are more urban and more ethnically diverse families than the original cohort. Early follow-up results from the Memphis sample suggest similar but more muted effects on children's problem behaviour (i.e. maternal but not teacher reports show intervention effects) and maternal functioning (e.g. fewer subsequent pregnancies and a lower rate of pregnancy-induced hypertension) up to age six. Importantly, the intervention targets multiple issues at a time of developmental transition, including the mother's health behaviours, the quality of the environment parents are generating for the child (e.g. maternal work skills, number of subsequent children born in the next couple of years), and parenting skills.

The programmatic work of Webster-Stratton and colleagues is also notable. Whereas Olds' work has focused on the challenges of becoming a parent (i.e. program limited to first-time parents), Webster-Stratton has targeted the late preschool period and the transition to formal schooling, when children's emotion regulation skills are becoming more stable and tested in the context of full-day school settings.^{6,22} A central focus of Webster-Stratton's program is parent management training to promote child social competence and prevent the development of conduct problems. In service of this goal, parents learn to observe their child's behaviour in an objective, unemotional manner and to implement appropriate consequences in response to disruptive behaviour. Webster-Stratton conducts parent-training sessions in groups using carefully refined videotapes, where parents can observe ways to manage children's behaviour and simultaneously learn from group leaders and other parents' experiences. Although begun primarily as a parenting intervention, the scope of the program has expanded to include a teacher-based classroom management component and a child-based component to improve regulation strategies and school readiness. In repeated RCTs with samples ranging from clinically referred middle-class preschoolers to low-income Head Start preschoolers at risk for psychosocial adjustment, significant improvements have repeatedly been found one to two years following the intervention in promoting children's prosocial adjustment and reducing children's problem behaviours.

Conclusions and Implications

Recent innovations in the scope of parenting programs are promising. Initial parenting programs have evolved to incorporate findings from developmental psychopathology that highlight the influence of child and parent attributes, as well as family and community factors that might compromise parenting and child psychosocial development. Greater methodological care is also becoming more normative in evaluating the efficacy of individual parenting programs, including the increasing use of RCTs. Substantively, the data suggest that parenting programs that also encompass the child's and family's social ecology, including contexts outside the home where the child spends significant time, are more likely to be associated with lasting improvements in child outcomes. The work of Olds and Webster-Stratton exemplifies the progress that has been made in the field. These model programs also suggest the need to re-evaluate the appropriateness of using the term "parenting programs" to describe the scope of successful family-based interventions for young children. Clearly, the most promising strategies incorporate parenting as a central foundation, but model programs also incorporate additional components to address

critical aspects of the child's and parents' social context. These additions to traditional parenting programs appear to be key ingredients for maximizing children's potential for positive social and emotional development within and outside the home.

References

1. Renken B, Egeland B, Marvinney D, Mangelsdorf S, Sroufe A. Early childhood antecedents of aggression and passive-withdrawal in early elementary school. *Journal of Personality* 1989;57(2):257-281.
2. Shaw DS, Gilliom M, Ingoldsby EM, Nagin DS. Trajectories leading to school-age conduct problems. *Developmental Psychology* 2003;39(2):189-200.
3. Baldwin AL, Kalhorn J, Breese FH. Patterns of parent behaviour. *Psychological Monographs* 1945;58(3).
4. Baumrind D. The development of instrumental competence through socialization. *Minnesota Symposia on Child Psychology* 1972;7:3-46.
5. Collins WA, Maccoby EE, Steinberg L, Hetherington EM, Bornstein MH. Contemporary research on parenting: The case for nature and nurture. *American Psychologist* 2000;55(2):218-232.
6. Webster-Stratton C, Hammond M. Treating children with early-onset conduct problems: A comparison of child and parent training interventions. *Journal of Consulting and Clinical Psychology* 1997;65(1):93-109.
7. Lieberman AF, Weston DR, Pawl JH. Preventive intervention and outcome with anxiously attached dyads. *Child Development* 1991;62(1):199-209.
8. Olds DL. Prenatal and infancy home visiting by nurses: From randomized trials to community replication. *Prevention Science* 2002;3(3):153-172.
9. Campbell FA, Ramey CT, Pungello EP, Sparling J, Miller-Johnson S. Early childhood education: Young adult outcomes from the Abecedarian Project. *Applied Developmental Science* 2002;6(1):42-57.
10. Schweinhart LJ. *Significant benefits: The High/Scope Perry Preschool Study through age 27*. Ypsilanti, Mich: High/Scope Press; 1993.
11. Brooks-Gunn J, McCormick MC, Shapiro S, Benasich A, Black GW. The effects of early education intervention on maternal employment, public assistance, and health insurance: the Infant Health and Development Program. *American Journal of Public Health* 1994;84(6):924-931.
12. Brooks-Gunn JC, McCarton CM, Casey PH, McCormick MC, Bauer CR, Bernbaum JC, Tyson J, Swanson M, Bennett FC, Scott DT, Tonascia J, Meinert CL. Early intervention in low-birth-weight premature infants: Results through age 5 years from the Infant Health and Development Program. *JAMA -Journal of the American Medical Association* 1994;272(16):1257-1262.
13. Gross D, Fogg L, Tucker S. The efficacy of parent training for promoting positive parent-toddler relationships. *Research in Nursing and Health* 1995;18(6):489-499.
14. Shaw DS, Dishion TJ, Supplee LH, Gardner F, Arnds K. A family-centered approach to the prevention of early-onset antisocial behaviour: Two-year effects of the family check-up in early childhood. *Journal of Consulting and Clinical Psychology*. In press.
15. Shaw DS, Bell RQ, Gilliom M. A truly early starter model of antisocial behavior revisited. *Clinical Child and Family Psychology Review* 2000;3(3):155-172.
16. Kohen DE, Brooks-Gunn J, Leventhal T, Hertzman C. Neighborhood income and physical and social disorder in Canada: Associations with young children's competencies. *Child Development* 2002;73(6):1844-1860.

17. Reynolds AJ, Ou S-R, Topitzes JW. Paths of effects of early childhood intervention on educational attainment and delinquency: A confirmatory analysis of the Chicago Child-Parent Centers. *Child Development* 2004;75(5):1299-1328.
18. Yoshikawa H. Long-term effects of early childhood programs on social outcomes and delinquency. *The Future of Children* 1995;5(3):51-75. Available at: http://www.futureofchildren.org/usr_doc/vol5no3ART3.pdf. Accessed March 6, 2006.
19. Layzer JL, Goodson BD, Bernstein L, Price C. *National evaluation of family support programs. Final report. Volume A: The meta-analysis*. Cambridge, Mass: Abt Associates; 2001. Available at: http://www.acf.hhs.gov/programs/opre/abuse_neglect/fam_sup/reports/famsup/fam_sup_vol_a.pdf. Accessed March 6, 2006.
20. Eckenrode J, Zielinski D, Smith E, Marcynyszyn LA, Henderson CR Jr, Kitzman H, Cole R, Powers J, Olds DL. Child maltreatment and the early onset of problem behaviors: Can a program of nurse home visitation break the link? *Development and Psychopathology* 2001;13(4):873-890.
21. Olds D, Hill P, Robinson J, Song N, Little C. Update on home visiting for pregnant women and parents of young children. *Current Problems in Pediatrics* 2000;30(4):107-141.
22. Baydar N, Reid MJ, Webster-Stratton C. The role of mental health factors and program engagement in the effectiveness of a preventive parenting program for Head Start mothers. *Child Development* 2003;74(5):1433-1453.

Parents' Attitudes and Beliefs: Their Impact on Children's Development

Joan E. Grusec, PhD, Tanya Danyliuk, BA

University of Toronto, Canada

December 2014, Éd. rév.

Introduction

Why do parents behave the way they do when raising children? One answer is that they are modelling the behaviour of their own parents, having learned how to parent in the course of being parented. Another is that they are behaving in accord with information about appropriate parenting acquired through books, Web sites, or informal and formal advice. Yet another major determinant of their behaviour lies in their general attitudes as well as specific beliefs, thoughts, and feelings that are activated during parenting: These have a powerful impact on behaviour, even if parents are distressed by or unaware of that impact. Researchers interested in children's development have explored parenting attitudes, cognitions, and the resulting emotions (such as anger or happiness), because of their influence on parenting behaviour and on the subsequent impact of that parenting behaviour on children's socioemotional and cognitive development.

Subject

Child-rearing attitudes are cognitions that predispose an individual to act either positively or negatively toward a child. Attitudes most frequently considered involve the degree of warmth and acceptance or coldness and rejection that exists in the parent-child relationship, as well as the extent to which parents are permissive or restrictive in the limits they set for their offspring. Researchers have also studied more situation-specific thoughts or schemas – filters through which parents interpret and react to events,, particularly ambiguous ones. These include cognitions such as beliefs about parenting abilities, expectations about what children are capable of or should be expected to do, and reasons why children have behaved in a particular way.

Problems

The influence of attitudes on parenting behaviours has been a favourite topic of investigation, with research suggesting that linkages are generally of a modest nature.¹ In part, this is because

reported attitudes do not always have a direct impact on parenting actions which are often directed by specific features of the situation. For example, parents might endorse or value being warm and responsive to children, but have difficulty expressing those feelings when their child is misbehaving. As a result of this realization the study of parent cognitions has been widened to include more specific ways of thinking.

Research Context

The study of parent attitudes, belief systems, and thinking has taken place along with changing conceptions of child-rearing. These changes have emphasized the bidirectional nature of interactions, with children influencing parents as well as parents influencing children.² Accordingly, an interesting extension of research on attitudes and cognitions has to do with how children's actions affect parents' attitudes and thoughts, although little work has been done in this area.

Key Research Questions

1. Which parental attitudes result in the best child outcomes?
2. How do negative/positive thoughts and cognitions hinder/facilitate child development?
3. How can parents' harmful attitudes be modified?

Recent Research Results

A large body of research on attitudes indicates that parental warmth together with reasonable levels of control combine to produce positive child outcomes. Although not strong, as noted above, the results are consistent. Researchers have noted that what is seen to be a reasonable level of control varies as a function of sociocultural context.³ Attitudes toward control are generally more positive in non Anglo-European cultures, with these attitudes having less detrimental effects on children's development because they are more normative and less likely to be interpreted as rejecting or unloving.^{3,4} In accord with the realization that children's behaviour affects that of their parents, researchers have found that, whereas parent attitudes affect child behaviour, this relation shifts as the child grows, with adolescent behaviour having an impact on parenting style and attitudes.⁵

Research on more specific cognitions also highlights the importance of parent thinking on child outcomes. As an example, parents look for reasons why both they and their children act the way

the do. These attributions can make parenting more efficient when they are accurate. They can also interfere with effective parenting when they lead to feelings of anger or depression (a possibility if children's bad behaviour is attributed to a bad disposition or an intentional desire to hurt, or the parent's failure or inadequacy). These negative feelings distract parents from the task of parenting, and make it more difficult for them to react appropriately and effectively to the challenges of socialization.⁶

Specific cognitions have been assessed both with respect to their impact on children's socioemotional development and on their cognitive development. For example, Bugental and colleagues have studied mothers who believe their children have more power than they do in situations where events are not going well.⁷ These mothers are threatened and become either abusive and hostile or unassertive and submissive. They send confusing messages to their children, with the result that children stop paying attention to them as well as showing a decrease in cognitive ability.⁸ This view of the power relationship takes its toll on mothers' ability to problem-solve and therefore to operate effectively in their parenting role. Similarly, mothers of infants who are low in self-efficacy, that is, do not believe they can parent effectively, give up on parenting when the task is challenging and become depressed. They are cold and disengaged in interactions with their babies.⁹ Furthermore, parents who trust that their child's course of biological development will proceed in a natural and healthy way are able to adjust better to their parenting role and less likely to develop a coercive parenting style.¹⁰

Other aspects of parent thinking include the ability to take the perspective of the child. Mothers who recognize what is distressing for their children have children who are better able to cope with their own distress¹¹ and parents who can accurately identify their children's thoughts and feelings during conflicts are better able to achieve satisfactory outcomes for those conflicts.¹²

"Mind-mindedness," the ability of parents to think of children as having mental states as well as being accurate in their assessment of these mental states, has been linked to children's secure attachment,¹³ with a positive link between mothers who describe their children using positive mental descriptors and mothers' sensitivity.¹⁴

Research Gaps

Little has been done to see how fathers' cognitions and attitudes affect child development. There has been some investigation of how mothers and fathers differ in their parental cognitions and parenting style: Mothers report higher endorsement of progressive parenting attitudes, encouraging their children to think and verbalize their own ideas and opinions, whereas fathers endorse a more authoritarian approach.¹⁵ What is unknown is the extent to which these differences in attitudes affect child outcomes. Another gap has to do with the direction of effect

between parent and child, that is, how children affect their parents' cognitions and attitudes.

Conclusions

The study of parent cognitions, beliefs, thoughts, and feelings can expand our knowledge of child development. Child-rearing cognitions influence parents to act either positively or negatively towards their children. These beliefs have been considered good predictors of parenting behaviour because they indicate the emotional climate in which children and parents operate and the health of the relationship. In sum, parents observe their children through a filter of conscious and unconscious thoughts, beliefs, and attitudes, and these filters direct the way they perceive their children's actions. When the thoughts are benign, they direct positive actions. When the thoughts are accurate they will usually lead to positive actions. When they are distorted and distressing, however, they distract parents from the task at hand as well as leading to negative emotions and attributions that ultimately impair effective parenting.

Implications for Policy and Services

Most intervention programs for parents involve teaching effective strategies for managing children's behaviour. But problems can also arise when parents engage in maladaptive thinking. Mothers at a higher risk of child abuse, for example, are more likely to attribute negative traits to children who demonstrate ambiguous behaviour, and see this behaviour as intentional.¹⁶ Bugental and her colleagues have administered a cognitive retraining intervention program for parents which aims to alter such biases. They found that mothers who participated in the program showed improvement in parenting cognitions, diminished levels of harsh parenting, and greater emotional availability. In turn, children, two years after their mothers participated in the program, displayed lower levels of aggressive behaviour as well as better cognitive skills than those whose mothers had not undergone such cognitive retraining.^{17,18,19} These findings, then, clearly underline the important role played by parental beliefs in the child-rearing process.

References

1. Holden GW, Buck MJ. Parental attitudes toward childrearing. In: Bornstein MH, ed. *Handbook of Parenting. Volume 3: Being and Becoming a Parent*. 2 ed. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:537-562.nd
2. Kuczynski L, ed. *Handbook of dynamics in parent child relations*. Thousand Oaks, Calif: Sage Publications; 2003.
3. Chen X, Fu R, Zhao S. Culture and socialization. In: Grusec JE, Hastings PD, Eds. *Handbook of Socialization*. New York: Guilford Press; 2014:451-472.
4. Rothbaum F, Trommsdorff G. Do roots and wings complement or oppose one another? The socialization of relatedness and autonomy in cultural context. In: Grusec JE, Hastings PD, Eds. *Handbook of Socialization*. New York: Guilford Press;

2007;461-489.

5. Kerr M, Stattin H, Özdemir M. Perceived parenting style and adolescent adjustment: Revisiting directions of effects and the role of parental knowledge. *Dev Psychol.* 2012;48:1540-1553.
6. Bugental DB, Brown M, Reiss C. Cognitive representations of power in caregiving relationships: Biasing effects on interpersonal interaction and information processing. *J Fam Psychol.* 1996;10:397-407.
7. Bugental DB, Lyon JE, Lin EK, McGrath EP, Bimbela A. Children “tune out” in response to ambiguous communication style of powerless adults. *Child Dev.* 1999;70:214-230.
8. Bugental DB, Happaney K. Parental attributions. In: Bornstein MH, ed. *Handbook of parenting. Volume 3: Being and becoming a parent.* 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:509-535.
9. Teti DM, Gelfand DM. Behavioral competence among mothers of infants in the first year: The mediational role of maternal self-efficacy. *Child Dev.* 1991;62:918-929.
10. Landry R, Whipple N, Mageau G, et al. Trust in organismic development, autonomy support and adaptation among mothers and their children. *Motiv Emotion.* 2008;32:173-188.
11. Vinik J, Almas A, Grusec JE. Mothers’ knowledge of what distresses and what comforts their children predicts children’s coping, empathy, and prosocial behavior. *Parent Sci Pract.* 2011;11:56-71.
12. Hastings P, Grusec JE. Conflict outcome as a function of parental accuracy in perceiving child cognitions and affect. *Soc Dev* 1997;6:76-90.
13. Bernier A, Dozier M. Bridging the attachment transmission gap: The role of maternal mind-mindedness. *Int J of Behav Dev* . 2003;27:355-365.
14. McMahon CA, Meins E. Mind-mindedness, parenting stress, and emotional availability in mothers of preschoolers. *Early Child Res Q.* 2012;27:245-252.
15. Bornstein MH, Putnick DL, Lansford JE. Parenting attributions and attitudes in cross-cultural perspective. *Parent Sci Pract.* 2011;11:214-237.
16. McCarthy R, Crouch J, Skowvonski, et al. Child physical abuse risk moderates spontaneously inferred traits from ambiguous child behaviors. *Child Abuse Neglect.* 2013;37:1142-1151.
17. Bugental DB, Ellerson PC, Lin EK, Rainey B, Kokotovic A, & O'Hara N. A cognitive approach to child abuse prevention. *Psychol Violence.* 2010;1: 84-106.
18. Bugental DB, Corpuz R, Schwartz A. Parenting children’s aggression: Outcomes of an early intervention. *Devel Psychol.* 2012;48:1443-1449.
19. Bugental DB, Schwartz A, Lynch C. Effects of an early family intervention on children's memory: The mediating effects of cortisol levels. *Mind, Brain, Educ.* 2010;4:159-170.

Can Changing Parental Knowledge, Dysfunctional Expectations and Attributions, and Emotion Regulation Improve Outcomes for Children?

Matthew R Sanders, PhD, Alina Morawska, PhD

University of Queensland, Australia

December 2014, 3e éd.

Introduction

The broader parent training literature has increasingly incorporated explicit consideration of cognitive and affective elements of the parenting role in explanations of parenting difficulties and in descriptions of how to intervene successfully with parents.^{1,2} To some extent, the notion that parents need to understand what is age-appropriate to develop reasonable expectations of children has been assumed. However, the evidence supporting the idea that early childhood parenting programs that explicitly target cognitive and affective changes result in better outcomes than more behaviourally skills-based programs is less clear. The present paper examines the conceptual and empirical basis for strategies such as increasing parents' knowledge of development norms, reducing age- inappropriate expectations or dysfunctional attributions, and increasing parents' capacity to regulate their own emotions.

Subject

The strongest potentially modifiable risk factor contributing to the development of behavioural and emotional problems in children is the quality of parenting a child receives. Evidence from behaviour genetics research and epidemiological, correlational, and experimental studies shows that parenting practices have a major influence on children's development.³

Problems

While the research has examined parental knowledge as a risk factor for poorer child development across a range of domains, a clear understanding of the mechanisms by which parental knowledge impacts on children's development and behaviour is lacking. Furthermore, studies that have specifically assessed for changes in parenting knowledge have been limited methodologically and have not delineated the processes by which parental knowledge changes,

and whether in fact the change in knowledge is associated with changes in child development and behaviour or whether other factors mediate the effect.

Similarly, there is currently no clear explication of the link between parental knowledge, parenting behaviour, parental mood and parenting efficacy, and especially how these change as a function of intervention. While the literature supports the idea that parenting knowledge, competence and efficacy are not necessarily related,⁴ the processes that underpin the development of discrepancies between the cognitive, affective and skills domains are unclear. For example, how do parents feel or believe they are competent in their role as a parent, when objective evidence suggests poor parenting skills and low knowledge about children's development?

The emphasis in the literature, and particularly in relation to parenting behaviours, has been on children's externalizing behaviour, non-compliance and psychopathology, and several models of coercive family processes leading to child externalizing behaviour have been delineated and supported.⁵ There is a paucity of research examining child competencies, both in terms of behaviour and developmental competencies (social, cognitive, emotional) and how parenting behaviours, parental knowledge, mood and self-efficacy interact with and impact on these competencies. As a result, while a number of interventions have been demonstrated to change parenting skills and child behaviour,¹ in general these studies have not focused on outcomes in terms of parental knowledge of children's development.

Research Context

A number of intra-organismic factors influence child development; however, many of the skills children acquire are fundamentally dependent on their interactions with their care-givers and the broader social environment. In addition to intrinsic factors, such as low birth weight, prematurity, and fetal alcohol exposure, a range of environmental risk factors have been identified as contributing to poor child developmental outcomes. For example, poverty has been identified as a risk factor for lower child cognitive test scores and more child behaviour problems.⁶ The effects of poverty are mediated and moderated through poor neighbourhoods, poor schools, poor basic services, greater environmental health risks, and via the stress these cause for the parent, impacting on the parent-child relationship.^{7,8} In general, risk factors in the care-giving environment are transmitted through the child's experiences in their primary care-giving relationship.⁹

Key Research Questions

1. What are the mechanisms by which parental knowledge impacts on children's development and behaviour?
2. Is a change in parent knowledge associated with changes in children's development or do other factors mediate the effect?
3. What is the link among parental knowledge, parenting behaviour, parental mood and parenting efficacy, and how do these change as a function of intervention?
4. How do parenting interventions impact on children's developmental competencies?
5. How can the impact of parenting interventions be strengthened?

Recent Research Results

The family environment is one of the most important potential contributors to children's development. Bradley¹⁰ concluded that in general, correlations between Home Observation for Measurement of the Environment (HOME) Inventory scores, which include the provision of learning materials, language and learning stimulation, variety in experience and active stimulation, and measures of children's developmental status and intelligence, are low to moderate (.2 to .6) during the first two years and moderate (.3 to .6) from three to five years of age. Similarly, Jackson and Schemes¹¹ found that preschool children whose mothers were more warm and supportive and provided cognitive stimulation at home had better language abilities as rated by their school teachers. More specifically, when parents are more supportive and less authoritarian, their children's verbal and intelligence scores are higher, when examined prospectively.^{12,13} Similarly, small to medium effect sizes have been found through meta-analysis for the relationship between mother-child attachment and children's peer relations,¹⁴ and there is evidence that attachment style predicts differing trajectories in terms of the child's emotion regulation.¹⁵

Parental knowledge of child development has often been mentioned as a factor related to child development outcomes. It can be defined as understanding of "developmental norms and milestones, processes of child development, and familiarity with caregiving skills."¹⁶ Parental knowledge is thought to provide a global cognitive organization for adapting to or anticipating developmental changes in children.¹⁷ Mothers who are knowledgeable respond more sensitively to their child's initiations,¹⁸ while mothers with inaccurate expectations about their child's

development tend to be more harsh.^{19,20,21} Studies have indicated that when mothers have higher knowledge of infant and child development, they show higher levels of parenting skills,^{16,22,23} their children have higher cognitive skills,^{16,24} and there are fewer child behaviour problems.¹⁶ Furthermore, a positive association has been found between parental self-efficacy and parenting competence when knowledge of child development is high. However, mothers who report high parental self-efficacy but low knowledge are least sensitive in their interactions with their infants.⁴

In general, there is scant research on parents' knowledge and particularly on the link between parental knowledge and other skills, such as behaviour management skills, parenting efficacy, parental mood and parenting conflict. In addition, the majority of research has focused on high-risk samples, specifically adolescent mothers and/or low birth weight and premature infants. A number of studies have examined whether parenting and family interventions increase parental knowledge, and there is evidence that this is the case.^{25,26,27,28} However, in general these studies have been uncontrolled, with small sample sizes, examining very high risk samples, and with no examination of the mechanism of action between increased knowledge and potential child outcomes.

Parents' beliefs about child development and the nature and causes of their child's behaviour have also been examined as factors related to child developmental outcomes. There is evidence that parents' inaccurate beliefs or overestimation of their child's performance actually undermine the child's performance,^{29,30,31} and that expectations have an effect on parenting behaviours.³² For example, adolescent mothers who reported more positive, more realistic and more mature expectations about parenting, children and the parent-child relationship had children with better coping skills, as rated through observation.¹⁷ Realistic expectations about child abilities have been related to greater child socio-emotional and cognitive competencies.³³ However, this association may work indirectly through parenting behaviours,³⁴ such that the mother's expectations affect her own behaviour, which in turn impacts on the child's developmental competencies.

Specific parenting behaviours and skills have been examined, particularly in relation to the development of aggressive and disruptive behaviour. Parents of aggressive children are characterized as highly punitive and critical of their children^{35,36} and more likely to attribute their children's misbehaviour to more dispositional, intentional and stable causes compared to parents of non-problem children.^{37,38,39} These attributional processes tend to become more pronounced

over time.⁴⁰

Parent-child interactions affect many different domains of development.^{41,42,43} Child- focused, responsive and moderately controlling parenting attitudes have been positively associated with self-esteem, academic achievement, cognitive development and fewer behaviour problems.^{44,45} Furthermore, high warmth and contingent responsiveness promote a wide range of positive developmental outcomes.^{46,47,48,49} Parental management style and affective involvement may be especially salient for children's prosocial development, self-control and internalization of behaviour standards.⁴¹ The quality of parenting has been found to be important for child socialization,^{50,51} and parenting variables show direct links with child adjustment.⁵²

The research on parental mood indicates that maternal mood disturbance and stress are associated with more child behaviour and emotional problems,^{53,54,55} and this finding has also been demonstrated for fathers.⁵⁶ In general, however, the link is higher for maternal than paternal psychopathology.⁵⁷ Higher depressive symptoms in the postpartum period have also been related to less accurate knowledge of infant development.⁵⁸ The link between parental mood and stress and children's behaviour is somewhat unclear, as a number of studies have failed to find a mediation effect of parenting behaviour between stress and child outcomes.^{53,59}

There is less evidence to support a link between parental mood disturbance and children's cognitive development. For example, Kurstjens and Wolke⁶⁰ concluded that maternal depression has negligible effects on the child's cognitive development (at six years), but may be more relevant long-term if depression is chronic, the child is a boy and there are neonatal risk or social risks in family. Nevertheless, parenting stress in the preschool years has been related to preschool teacher ratings of social competence, as well as internalizing behaviour and externalizing problems.⁵⁹ In addition, Schmidt, Demulder, and Denham⁶¹ found that more family stress during the preschool years was associated with greater child aggression, and anxiety and lower social competence in kindergarten.

The value of parenting interventions in improving parenting practices

Parent Management Training (PMT) interventions, derived from social-learning, functional analysis, and cognitive-behavioural principles, are considered the interventions of choice for conduct problems in young children.^{62,63,64} PMT programs have also been proven efficacious in prevention studies.^{65,66} Positive effects for PMT interventions have been replicated many times

across different studies, investigators and countries, and with a diverse range of client populations.¹ In PMT programs, parents are typically taught to increase positive interactions with children and to reduce coercive and inconsistent parenting practices. Studies demonstrating the *efficacy* of PMT interventions show improvements in parental perceptions and parenting skills, improvements in children's social skills and school adjustment, and reductions in behaviour and attention problems.^{66,67} PMT interventions are associated with large effect sizes,⁶⁸ the effects often generalize to a variety of home and community settings,^{69,70} they are maintained over time,⁷¹ and are associated with high levels of consumer satisfaction.⁷² PMT has been successfully used with two-biological-parent families, step-parents and single parents. There is mounting evidence that a variety of delivery modalities can produce positive outcomes for children,¹ including individually administered face-to-face programs,⁷³ group programs^{74,75,76} telephone-assisted programs^{77,78} and self-directed programs.^{79,80} In addition, a number of *effectiveness* trials of PMT interventions have demonstrated meaningful effects for children with conduct problems.^{81,82}

Conclusions

Although parenting programs based on social learning models have been remarkably successful in assisting parents to change their children's behaviour and improve their relationships with their children, there is still a great deal to learn about how to promote concurrent change across the cognitive, affective and behavioural domains of parenting. Greater understanding of the cognitive and affective mechanisms that may underpin parents becoming more positive and less negative with their children is needed.

Implications

Strengthening the impact of parenting interventions

Despite the strength of the evidence for PMT cited above, there are several potentially important future directions that might further strengthen the population reach and impact of parenting interventions.

The use of modelling and demonstration of core parenting skills is likely to be a core feature of any effective intervention on parenting. Research on the value of observation learning and video-based modelling^{83,84,85} validates the importance of this approach. But key elements from attitude and behaviour change models (cognitive social learning theory, social influence theory and acceptance-based models) are still underutilized. Bandura's^{83,84} cognitive social learning theory is

a useful conceptual framework for the development of media interventions, as it highlights the importance of both external and internal factors, including associated cognitive mechanisms that influence human behaviour. This theory points to the importance of using strategies that increase parental self-efficacy and that create favourable outcome expectancies, which in turn increase parents' behavioural intentions, their setting of personal performance standards and their self-evaluation of their performance. The social influence model⁸⁶ is also a useful conceptual framework to guide development of media interventions, as it highlights the core principles that promote successful persuasion and influence; for example, to the extent that interventions make use of the power of social validation by similar or liked others (i.e. "others like me are doing it") and of humans' tendency to act in accordance with prior commitments to others and to deep-seated values, they are likely to have more influence on viewers' attitudes, intents and behaviours. Finally, acceptance-based models of behaviour change⁸⁷ emphasize the importance of managing distressing thoughts and feelings in such a way that they do not interfere with taking effective action.

To strengthen the impact of a parenting skills intervention, various elements from cognitive social learning theory, social influence theory and acceptance theory could be used to enhance changes in parental behaviour, affect and cognition. Parents are more likely to learn the skills, increase their intentions to implement them and actually implement and maintain them when targeted parenting skills are modelled and demonstrated, *and also* (a) dysfunctional attributions or beliefs about the reasons for children's behaviour are changed; (b) positive expectancies and parenting self-efficacy are increased; (c) social supports are activated; and (d) parents learn to manage distressing affect that interferes with effective parenting.

References

1. Sanders MR. Triple P-Positive Parenting Program: Towards an empirically validated multilevel parenting and family support strategy for the prevention of behavior and emotional problems in children. *Clinical Child and Family Psychology Review* 1999;2(2):71-90.
2. Webster-Stratton C, Hancock L. Training for parents of young children with conduct problems: Content, methods, and therapeutic processes In: Briesmeister JM, Schaefer CE, eds. *Handbook of parent training: Parents as co-therapists for children's behavior problems*. 2nd ed. Hoboken, NJ: John Wiley and Sons; 1998:98-152.
3. Collins WA, Maccoby EE, Steinberg L, Hetherington EM, Bornstein MH. Contemporary research on parenting: The case for nature and nurture. *American Psychologist* 2000;55(2):218-232.
4. Hess CR, Teti DM, Hussey-Gardner B. Self-efficacy and parenting of high-risk infants: The moderating role of parent knowledge of infant development. *Journal of Applied Developmental Psychology* 2004;25(4):423-437.
5. Patterson GR. *Coercive family process*. Eugene, Ore: Castalia Publishing Co; 1982.

6. NICHD Early Child Care Research Network. Duration and developmental timing of poverty and children's cognitive and social development from birth through third grade. *Child Development* 2005;76(4):795-810.
7. Aber JL, Jones S, Cohen J. The impact of poverty on the mental health and development of very young children. In: Zeanah CH Jr, ed. *Handbook of infant mental health*. 2nd ed. New York, NY: Guilford Press; 2000:113-128.
8. Sameroff AJ, Fiese BH. Models of development and developmental risk. In: Zeanah CH Jr, ed. *Handbook of infant mental health*. 2nd ed. New York, NY: Guilford Press; 2000:3-19.
9. Zeanah CH Jr, Larrieu JA, Heller SS, Valliere J. Infant-parent relationship assessment. In: Zeanah CH Jr, ed. *Handbook of infant mental health*. 2nd ed. New York, NY: Guilford Press; 2000:222-235.
10. Bradley RH. The HOME Inventory: Review and reflections. In: Reese HW, ed. *Advances in child development and behavior*. Vol 25. San Diego, Calif: Academic Press; 1994:241-288.
11. Jackson AP, Schemes R. Single mothers' self-efficacy, parenting in the home environment, and children's development in a two-wave study. *Social Work Research* 2005;29(1):7-20.
12. Shears J, Robinson J. Fathering attitudes and practices: Influences on children's development. *Child Care in Practice* 2005;11(1):63-79.
13. Tamis-LeMonda CS, Shannon JD, Cabrera NJ, Lamb ME. Fathers and mothers at play with their 2- and 3-year-olds: Contributions to language and cognitive development. *Child Development* 2004;75(6):1806-1820.
14. Schneider BH, Atkinson L, Tardif C. Child-parent attachment and children's peer relations: A quantitative review. *Developmental Psychology* 2001;37(1):86-100.
15. Kochanska G. Emotional development in children with different attachment histories: The first three years. *Child Development* 2001;72(2):474-490.
16. Benasich AA, Brooks-Gunn J. Maternal attitudes and knowledge of child-rearing: Associations with family and child outcomes. *Child Development* 1996;67(3):1186-1205.
17. Stoiber KC, Houghton TG. The relationship of adolescent mothers' expectations, knowledge, and beliefs to their young children's coping behavior. *Infant Mental Health Journal* 1993;14(1):61-79.
18. Damast AM, Tamis-LeMonda CS, Bornstein MH. Mother-child play: Sequential interactions and the relation between maternal beliefs and behaviors. *Child Development* 1996;67(4):1752-1766.
19. Azar ST, Robinson DR, Hekimian E, Twentyman CT. Unrealistic expectations and problem solving ability in maltreating and comparison mothers. *Journal of Consulting and Clinical Psychology* 1984;52(4):687-691.
20. Fry PS. Relations between teenagers' age, knowledge, expectations and maternal behaviour. *British Journal of Developmental Psychology* 1985;3(1):47-55.
21. Twentyman CT, Plotkin RC. Unrealistic expectations of parents who maltreat their children: An educational deficit that pertains to child development. *Journal of Clinical Psychology* 1982;38(3):497-503.
22. Huang KY, Caughy MOB, Geneviro JL, Miller TL. Maternal knowledge of child development and quality of parenting among White, African-American and Hispanic mothers. *Journal of Applied Developmental Psychology* 2005;26(2):149-170.
23. Stevens JH. Child development knowledge and parenting skills. *Family Relations* 1984;33(2):237-244.
24. Dichtelmiller M, Meisels SJ, Plunkett JW, Bozynski MEA, Claflin C, Mangelsdorf SC. The relationship of parental knowledge to the development of extremely low birth weight infants. *Journal of Early Intervention* 1992;16(3):210-220.
25. Culp AM, Culp RE, Blankemeyer M, Passmark L. Parent education home visitation program: Adolescent and nonadolescent mother comparison after six months of intervention. *Infant Mental Health Journal* 1998;19(2):111-123.
26. Fulton AM, Murphy KR, Anderson SL. Increasing adolescent mothers' knowledge of child development: An intervention program. *Adolescence* 1991;26(101):73-81.

27. Hammond-Ratzlaff A, Fulton A. Knowledge gained by mothers enrolled in a home visitation program. *Adolescence* 2001;36(143):435-442.
28. Velez ML, Jansson LM, Montoya ID, Schweitzer W, Golden A, Svikis D. Parenting knowledge among substance abusing women in treatment. *Journal of Substance Abuse Treatment* 2004;27(3):215-222.
29. Miller SA. Parents' beliefs about children's cognitive development. *Child Development* 1988;59(2):259-285.
30. Miller SA, Manhal M, Mee LL. Parental beliefs, parental accuracy, and children's cognitive performance: A search for causal relations. *Developmental Psychology* 1991;27(2):267-276.
31. Stoiber KC. Parents' beliefs about their children's cognitive, social, and motor functioning. *Early Education and Development* 1992;3(3):244-257.
32. Donahue ML, Pearl R, Herzog A. Mothers' referential communication with preschoolers: Effects of children's syntax and mothers' beliefs. *Journal of Applied Developmental Psychology* 1997;18(1):133-147.
33. McGillicuddy-DeLisi AV. Parental beliefs and developmental processes. *Human Development* 1982;25(3):192-200.
34. Miller-Loncar CL, Landry SH, Smith KE, Swank PR. The influence of complexity of maternal thoughts on sensitive parenting and children's social responsiveness. *Journal of Applied Developmental Psychology* 2000;21(3):335-356.
35. Dishion TJ. The family ecology of boys' peer relations in middle childhood. *Child Development* 1990;61(3):874-892.
36. Rubin KH. Parents of aggressive and withdrawn children. In: Bornstein MH, ed. *Children and parenting*. Hillsdale, NJ: Lawrence Erlbaum Associates; 1995:255-284. *Handbook of parenting*; vol 1.
37. Baden AD, Howe GW. Mothers' attributions and expectancies regarding their conduct-disordered children. *Journal of Abnormal Child Psychology* 1992;20(5):467-485.
38. Barkley RA, Guevremont DC, Anastopoulos AD, Fletcher KE. A comparison of three family therapy programs for treating family conflicts in adolescents with attention-deficit hyperactivity disorder. *Journal of Consulting and Clinical Psychology* 1992;60(3):450-462.
39. Dix T, Lochman JE. Social cognition and negative reactions to children: A comparison of mothers of aggressive and nonaggressive boys. *Journal of Social and Clinical Psychology* 1990;9(4):418-438.
40. Hastings PD, Rubin KH. Predicting mothers' beliefs about preschool-aged children's social behavior: Evidence for maternal attitudes moderating child effects. *Child Development* 1999;70(3):722-741.
41. Campbell SB. Behavior problems in preschool children: Developmental and family issues. *Advances in Clinical Child Psychology* 1997;19:1-26.
42. Ramey CT, Ramey SL. Early intervention and early experience. *American Psychologist* 1998;53(2):109-120.
43. Yoshikawa H. Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin* 1994;115(1):28-54.
44. Kendziora KT, O'Leary SG. Dysfunctional parenting as a focus for prevention and treatment of child behavior problems. *Advances in Clinical Child Psychology* 1993;15:175-206.
45. Stein MT, Robinson JR. Feeding problems, sleep disturbances, and negative behaviors in a toddler. *Journal of Developmental and Behavioral Pediatrics* 2001;22(2 Suppl):S81-S85.
46. Bornstein MH, Tamis-LeMonda CS. Maternal responsiveness and cognitive development in children. In: Bornstein MH, ed. *Maternal responsiveness: Characteristics and consequences*. San Francisco, Calif: Jossey-Bass/Pfeiffer; 1989:49-61.
47. Parpal M, Maccoby EE. Maternal responsiveness and subsequent child compliance. *Child Development* 1985;56(5):1326-1334.
48. Rocissano L, Slade A, Lynch V. Dyadic synchrony and toddler compliance. *Developmental Psychology* 1987;23(5):698-704.

49. Smith KE, Landry SH, Swank PR. The influence of early patterns of positive parenting on children's preschool outcomes. *Early Education and Development* 2000;11(2):147-169.
50. Dunn JF. Relations among relationships. In: Duck S, Hay DF, Hobfoll SE, Ickes W, Montgomery BM, eds. *Handbook of personal relationships: Theory, research and interventions*. Oxford, England: John Wiley & Sons; 1988:193-209.
51. Kochanska G. Socialization and temperament in the development of guilt and conscience. *Child Development* 1991;62(6):1379-1392.
52. Rothbaum F, Weisz JR. Parental caregiving and child externalizing behavior in nonclinical samples: A meta-analysis. *Psychological Bulletin* 1994;116(1):55-74.
53. Crnic KA, Gaze C, Hoffman C. Cumulative parenting stress across the preschool period: Relations to maternal parenting and child behaviour at age 5. *Infant and Child Development* 2005;14(2):117-132.
54. Leinonen JA, Solantaus TS, Punamaki R-L. Parental mental health and children's adjustment: The quality of marital interaction and parenting as mediating factors. *Journal of Child Psychology and Psychiatry* 2003;44(2):227-241.
55. Luoma I, Koivisto A-M, Tamminen T. Fathers' and mothers' perceptions of their child and maternal depressive symptoms. *Nordic Journal of Psychiatry* 2004;58(3):205-211.
56. Ramchandani P, Stein A, Evans J, O'Connor TG, ALSPAC study team. Paternal depression in the postnatal period and child development: a prospective population study. *Lancet* 2005;365(9478):2201-2205.
57. Connell AM, Goodman SH. The association between psychopathology in fathers versus mothers and children's internalizing and externalizing behavior problems: a meta-analysis. *Psychological Bulletin* 2002;128(5):746-773.
58. Veddovi M, Kenny DT, Gibson F, Bowen J, Starte D. The relationship between depressive symptoms following premature birth, mothers' coping style, and knowledge of infant development. *Journal of Reproductive and Infant Psychology* 2001;19(4):313-323.
59. Anthony LG, Anthony BJ, Glanville DN, Naiman DQ, Waanders C, Shaffer S. The relationships between parenting stress, parenting behaviour and preschoolers' social competence and behaviour problems in the classroom. *Infant and Child Development* 2005;14(2):133-154.
60. Kurstjens S, Wolke D. Effects of maternal depression on cognitive development of children over the first 7 years of life. *Journal of Child Psychology and Psychiatry* 2001;42(5):623-636.
61. Schmidt ME, Demulder EK, Denham S. Kindergarten social-emotional competence: Developmental predictors and psychosocial implications. *Early Child Development and Care* 2002;172(5):451-462.
62. Prinz RJ, Jones TL. Family-based interventions. In: Essau CA, ed. *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment*. Mahwah, NJ: Lawrence Erlbaum Associates; 2003:279-298.
63. Sanders MR, Ralph A. Towards a multi-level model of parenting intervention. In: Hoghughi M, Long N, eds. *Handbook of parenting: theory and research for practice*. London, England: Sage Publications; 2004:352-368.
64. Taylor TK, Biglan A. Behavioral family interventions for improving child-rearing: A review of literature for clinicians and policy makers. *Clinical Child and Family Psychology Review* 1998;1(1):41-60.
65. Sanders MR, Markie-Dadds C, Turner KMT, Ralph A. Using the Triple P system of intervention to prevent behavioural problems in children and adolescents. In: Barrett PM, Ollendick TH, eds. *Handbook of interventions that work with children and adolescents: Prevention and treatment*. Chichester, England: John Wiley; 2004:489-516.
66. Webster-Stratton C. Preventing conduct problems in Head Start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology* 1998;66(5):715-730.
67. Barlow J, Stewart-Brown S. Behavior problems and group-based parent education programs. *Journal of Developmental and Behavioral Pediatrics* 2000;21(5):356-370.

68. Serketich WJ, Dumas JE. The effectiveness of behavioral parent training to modify antisocial behavior in children: A meta-analysis. *Behavior Therapy* 1996;27(2):171-186.
69. McNeil CB, Eyberg S, Eisenstadt TH, Newcomb K, Funderburk B. Parent-child interaction therapy with behavior problem children: Generalization of treatment effects to the school setting. *Journal of Clinical Child Psychology* 1991;20(2):140-151.
70. Sanders MR, Dadds MR. The effects of planned activities and child management procedures in parent training: An analysis of setting generality. *Behavior Therapy* 1982;13(4):452-461.
71. Long P, Forehand R, Wierson M, Morgan A. Does parent training with young noncompliant children have long-term effects? *Behaviour Research and Therapy* 1994;32(1):101-107.
72. Webster-Stratton C. Systematic comparison of consumer satisfaction of three cost-effective parent training programs for conduct problem children. *Behavior Therapy* 1989;20(1):103-115.
73. Forehand RL, McMahon RJ. *Helping the noncompliant child: a clinician's guide to parent training*. New York, NY: Guilford Press; 1981.
74. Ralph A, Sanders MR. Preliminary evaluation of the Group Teen Triple P program for parents of teenagers making the transition to high school. *Australian e-Journal for the Advancement of Mental Health* 2003;2(3).
75. Sanders MR, Markie-Dadds C, Tully LA, Bor W. The Triple P - Positive Parenting Program: a comparison of enhanced, standard, and self-directed behavioral family intervention for parents of children with early onset conduct problems. *Journal of Consulting and Clinical Psychology* 2000;68(4):624-640.
76. Webster-Stratton C. Long-term follow-up of families with young conduct problem children: From preschool to grade school. *Journal of Clinical Child Psychology* 1990;19(2):144-149.
77. Connell S, Sanders MR, Markie-Dadds C. Self-directed behavioral family intervention for parents of oppositional children in rural and remote areas. *Behavior Modification* 1997;21(4):379-408.
78. Morawska A, Sanders MR. Self-administered behavioural family intervention for parents of toddlers: Part I - Efficacy. *Journal of Consulting and Clinical Psychology*. In press.
79. Gordon DA. Parent training via CD-ROM: Using technology to disseminate effective prevention practices. *Journal of Primary Prevention* 2000;21(2):227-251.
80. Webster-Stratton C, Hollinsworth T, Kolpacoff M. The long-term effectiveness and clinical significance of three cost-effective training programs for families with conduct-problem children. *Journal of Consulting and Clinical Psychology* 1989;57(4):550-553.
81. Scott S, Spender Q, Doolan M, Jacobs B, Aspland H. Multicenter controlled trial of parenting groups for childhood antisocial behaviour in clinical practice. *British Medical Journal* 2001;323(7306):194-198.
82. Taylor TK, Schmidt F, Pepler D, Hodgins C. A comparison of eclectic treatment with Webster-Stratton's parents and children series in a children's mental health center: A randomized controlled trial. *Behavior Therapy* 1998;29(2):221-240.
83. Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review* 1977;84(2):191-215.
84. Bandura A. *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall; 1986.
85. Harwood RL, Weissberg RP. The potential of video in the promotion of social competence in children and adolescents. *Journal of Early Adolescence* 1987;7(3):345-363.
86. Cialdini RB. *Influence: science and practice*. 4th ed. Boston, Mass: Allyn and Bacon; 2001.
87. Hayes SC, Strosahl KD, eds. *A practical guide to acceptance and commitment therapy*. New York, NY: Springer Science; 2005.

Sources, Effects and Possible Changes in Parenting Skills: Comments on Belsky, Grusec, and Sanders and Morawska

Jacqueline J. Goodnow, PhD

Macquarie University, Sydney, Australia

December 2014, 3e éd.

Introduction

Research on parenting skills offers a route into understanding development and a potential basis for clinical, educational or social action. To that research, these authors bring the assumptions that the quality of parenting matters and that it is open to change. They also share a record of productive breaks from some traditional approaches, leading research in new directions and offering changes in implications for action. Where they differ is in the nature of those breaks.

Grusec, for example, builds on a long-standing interest in parents' general "styles" (e.g. their warmth, coerciveness, consistency, sense of efficacy) and "schemas" (e.g. their views about appropriate methods of control). There is an additional recognition that parents can hold more than one view of children or parenting (e.g. parenting as easy or impossible). What matters then are the particular thoughts, feelings and actions that come to the fore in specific situations, especially problem situations.

Belsky starts from a long-standing recognition of two influences on parenting: the characteristics of the child and those of the parent. To the latter, he brings a revitalized interest in a parent's own history (parenting is in this sense "inheritable"). To both, he adds an emphasis on "the broader social context" (this includes the relationship between parents) and on the accumulation of stresses and supports that multiple influences involve.

Sanders and Morawska start from a tradition of action often cast in a clinical frame. They argue for a move beyond parents who are already experiencing problems. Instead, all parents may benefit from instruction or advice related to the nature of development and to useful strategies. Parents' expectations, for example, may then become more age-appropriate. They may also avoid coercive strategies, building instead on the positives already present.

Research and Conclusions

It would be unreasonable to expect three short papers to cover the field, noting all its directions and implications. I would have liked, however, to see more space given to four trends.

The first trend has to do with *ways of specifying parenting skills, both within and outside the home*. Within the family, parents' skills in interpreting events and in establishing some degree of routine or pattern in family life have emerged as important, both for everyday life (e.g. understanding television, establishing safety rules) and at times of trauma or radical change.¹⁻⁴ Outside the family, skill takes the form of being alert to what neighbourhoods offer and being able to negotiate with daycare centres or schools in order to achieve one's goals.^{5,6} It also takes the form of effective monitoring. Children are not always under a parent's eyes. Parents need to be able to stay informed about what children do, either by a direct check or – from a young age – promoting a child's willingness to “disclose.”^{7,8} For the mix of life within and “outside,” skill may also take the form of effectively preparing children for what they may encounter (especially negative encounters).^{9,10}

The second trend has to do with *ways of specifying outcomes, for children or for parents*. There is general agreement that we need tighter accounts of which aspects of parenting are related to which outcomes and by what processes, especially over time. We also need to have a wider recognition of outcomes in relational terms: for example, in terms of a child's sense of reciprocity or group membership (e.g. “we're a family”) or collective identity.¹¹⁻¹⁴

The third trend has to do with *ways of putting children more fully into the picture*. We now know more about parents' views of parenting and of children than about children's views of what makes a good parent or what represents appropriate parental action.¹⁵ This is all the more surprising in the face of proposals that children's interpretations are a major part of children coming to adopt parents' values and to see them as their own.^{16,17}

The fourth and last piece that I see as needing more emphasis has to do with *cultural variations in the way parents think, feel or act*, as noted briefly by Grusec and now strongly documented.¹⁸⁻²⁰ Those variations matter not simply as a way of documenting that people differ. They are also a vivid reminder of the need, when one social or cultural group decides that the skills of another need improving, to examine the values and assumptions of both groups, and their views of each other.²¹

Implications for Policy

Research can contribute to action in two large ways.²² One is by providing general models that guide decisions: models, for example, of why parents act as they do or – less apparent in the present papers – of how children change (e.g. models of whether children grow into or grow out of aggressive behaviours²³). The other route is by input into more specific policy questions: questions about why, when, who and how.

Questions about “who” provide a starting point for comparing the present papers. In one approach (often described as “targeted”), the emphasis is on particular groups of parents. Grusec, for example, places the emphasis on parents who are already experiencing problems. The critical issue is then one of isolating where the problem lies and how it can best be tackled. Grusec points to the value of considering specific problem situations (in everyday terms, this might mean pinpointing “the worst times of the day” or times when parents are at risk of losing their temper). Action can then be directed toward ways of coping with the particular feelings, thoughts or strategies that are “activated” at these times and that get in the way of effective action.

Sanders and Morawska come closer to approaches that have been called “universal.” Skill in parenting is in many ways seen as comparable to skill in driving a car. It seldom comes naturally, and it always benefits from some degree of instruction. The parents of most interest are first-timers (first baby, or first encounters with a new problem). Potentially, however – and Sanders and Morawska suggest this expansion – providing a mix of useful strategies and information could be brought to bear on all aspects of behaviour and all groups of parents, before or after the appearance of difficulties. It could also be provided by ways not limited to face-to-face approaches.

Neither of these papers, however, points strongly to changes in the physical or social environment. It is possible to aim to change the way daycare centres or schools operate, to try to improve social contexts (e.g. promoting parent-friendly work practices), or to enhance parents’ financial resources, all in ways that can flow on to what parents do and how children develop.²⁴ Belsky’s emphasis on multiple influences on parenting comes closest to including this approach. There is, he argues, no single way forward. Instead, a variety of steps may alter the accumulation of stresses and supports that shapes the nature of parenting.

In effect, the implications for action are varied. All three papers share, however, an emphasis on the ultimate goal being changes within the child and within the parent-child interactions. These changes also remain the prime indicators of effects from any action taken. All three also provide a clear sense of major concerns and a strong reminder of the need to continue both with research and with the analysis of what its results and its underlying concepts imply for the way

parenting proceeds.

References

1. Gralinski JH, Kopp CB. Everyday rules for behavior: Mothers' requests to young children. *Developmental Psychology* 1993;29(3):573-584.
2. Pecora N, Murray JP, Wartella EA, eds. *Children and television: 50 years of research*. Mahwah, NJ: Lawrence Erlbaum; 2006.
3. La Greca AM, Silverman WK, Vernberg EM, Roberts MC, eds. *Helping children cope with disasters and terrorism*. Washington, DC: American Psychological Association; 2002.
4. Lowe ED, Weisner TS, Geis S, Huston AC. Child-care instability and the effort to sustain a working daily routine: Evidence from the New Hope Ethnographic Study of Low-Income Families. In: Cooper CR, Coll CTG, Bartko WT, Davis H, Chatman C, eds. *Developmental pathways through middle childhood: Rethinking contexts and diversity as resources*. Mahwah, NJ: Lawrence Erlbaum; 2005:121-144.
5. Furstenberg FF Jr, Cook TD, Eccles, J, Elder GH Jr, Sameroff A. *Managing to make it: Urban families and adolescent success*. Chicago, Ill: University of Chicago Press; 1999.
6. Weiss HB, Dearing E, Mayer E, Kreider H, McCartney K. Family educational involvement: Who can afford it and what does it afford? In: Cooper CR, Coll CTG, Bartko WT, Davis H, Chatman C, eds. *Developmental pathways through middle childhood: Rethinking contexts and diversity as resources*. Mahwah, NJ: Lawrence Erlbaum Associates; 2005:17-39.
7. Stattin H, Kerr M. Parental monitoring: A reinterpretation. *Child Development* 2000;71(4):1072-1085.
8. Barber BK, Stolz HE, Olsen JA. Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development* 2005;70(4):1-137.
9. Hughes D, Chen L. The nature of parents' race-related communications to children: A developmental perspective. In: Balter L, Tamis-LeMonda CS, eds. *Child psychology: A handbook of contemporary issues*. New York, NY: Psychology Press; 1999:467-490.
10. Goodnow JJ. Parenting and the transmission and internalization of values: From social-cultural perspectives to within-family analyses. In: Grusec JE, Kuczynski L, eds. *Parenting and children's internalization of values: A handbook of contemporary theory*. Hoboken, NJ: John Wiley and Sons; 1997:333-361.
11. Parpal M, Maccoby EE. Maternal responsiveness and subsequent child compliance. *Child Development* 1985;56(5):1326-1334.
12. Collins WA, Laursen B. Parent-adolescent relationships and influences. In: Lerner RM, Steinberg L, eds. *Handbook of adolescent psychology*. 2nd ed. Hoboken, NJ: John Wiley and Sons; 2004:331-362.
13. Fuligni AJ, Alvarez J, Bachman, M, Ruble DN. Family obligation and the academic motivation of young children from immigrant families. In: Cooper CR, Coll CTG, Bartko WT, Davis H, Chatman C, eds. *Developmental pathways through middle childhood: Rethinking contexts and diversity as resources*. Mahwah, NJ: Lawrence Erlbaum Associates; 2005:261-282.
14. Hudley EVP, Haight W, Miller PJ. *"Raise up a child": Human development in an African-American family*. Chicago, Ill: Lyceum Books; 2003.
15. Smetana JG, Asquith P. Adolescents' and parents' conceptions of parental authority and personal autonomy. *Child Development* 1994;65(4):1147-1162.
16. Grusec JE, Goodnow JJ. Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology* 1994;30(1): 4-19.

17. Seginer R, Vermulst A. Family environment, educational aspirations, and academic achievement in two cultural settings. *Journal of Cross-Cultural Psychology* 2002;33(6):540-558.
18. Chao RK. Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development* 1994;65(4):1111-1119.
19. Harkness S, Super CM, eds. *Parents' cultural belief systems: their origins, expressions, and consequences*. New York, NY: Guilford Press; 1996.
20. Miller PJ, Wiley AR, Fung H, Liang, C-H. Personal storytelling as a medium of socialization in Chinese and American families. *Child Development* 1997;68(3):557-568.
21. Goodnow JJ. Interconnections: families and communities, concepts and interactions. In: Clarke-Stewart A, Dunn C. *Families matter*. Cambridge, Mass: Cambridge University Press. In press.
22. Goodnow JJ. Parents' knowledge and expectations: Using what we know. In: Bornstein MH, ed. Being and becoming a parent. Mahwah, NJ: Lawrence Erlbaum Associates; 2002:439-460. *Handbook of parenting*. 2nd ed; vol 3.
23. Tremblay RE. The development of aggressive behaviour during childhood: What have we learned in the last century? *International Journal of Behavioral Development* 2000;24(2):129-141.
24. Huston AC, Duncan GJ, Granger R, Bos J, McLoyd V, Mistry R, Crosby D, Gibson C, Magnuson K, Romich J, Ventura A. Work-based antipoverty programs for parents can enhance the school performance and social behavior of children. *Child Development* 2001;72(1):318-336.

Parenting and Sleeping Problems and Universal Parenting Programs

Harriet Hiscock, MBBS, FRACP, MD

Centre for Community Child Health, The Royal Children's Hospital, Murdoch Childrens Research Institute, and Department of Paediatrics, University of Melbourne, Australia

December 2014

Introduction

Sleep problems in infants and children are common and typically include problems going to sleep and problems maintaining sleep. Sleep problems can be further divided into medical (e.g., obstructive sleep apnea) and behavioural problems. Parenting often plays a role in the development and maintenance of behavioural problems. This review therefore focuses on behavioural sleep problems, how parenting may perpetuate or reduce such problems, and the role of universal parenting programs in the prevention of behavioural sleep problems.

Subject

Before understanding how parenting may give rise to sleep problems, we first need to understand normal sleep. Infants and children (like adults) pass from consciousness into non-Rapid Eye Movement (NREM) or deep sleep, then into REM or light sleep, and back into NREM sleep, several times per night.¹ These phases are known as ‘sleep cycles’ and last 20- 50 minutes in infants and children and 90 minutes in adults. A child can wake fully from light sleep and either self-settle back to sleep or signal (i.e., call out) to their parent. The way an infant or child is settled to sleep at the start of the night often dictates how they re-settle after naturally waking overnight.¹ Thus if the last thing a child remembers is being fed, having a pacifier, or being rocked to sleep, upon waking they will call out for a parent to come and feed them, replace their pacifier, or rock them before returning to sleep once more. These actions are known as “parent-dependent” sleep cues.

Problems

How a parent settles their child to sleep and responds to night waking is key to development and thus management of behavioural sleep problems.² A ‘coercion trap’ can occur whereby a parent rocks their child to sleep, their child wakes some hours later and calls out, the parent returns to

rock their child, the child goes back to sleep (thereby reinforcing the parent's response) but wakes again and wants to be rocked.¹ This can lead to parental fatigue and depression as well as inadequate and fragmented sleep for the child.^{3,4}

Research Context

Teaching parents to allow their infant or child to self-settle at the start of the night can greatly improve problems getting to sleep and re-settling over night. Randomized controlled trials have demonstrated that teaching parents to use graduated extinction (i.e., parent checks on and comforts their infant at increasing time intervals but leaves the room before the infant falls asleep) or adult fading (i.e., a parent places a camp bed or chair next to their infant's cot, pats their infant to sleep for the first few nights, then gradually moves their camp bed or chair out of the infant's bedroom over a period of weeks) reduces both infant sleep problems and maternal depression symptoms.⁵ In toddlers, provision of a bedtime routine by parents has also been shown to reduce sleep problems.⁶

Key Research Questions

What is less clear however, is whether (i) parenting can be modified to prevent sleep problems arising; (ii) if so, which parenting practices are best to modify; and (iii) if there is a subgroup(s) of infants who respond better to prevention.

Recent Research Results

A number of randomised trials have evaluated programs aimed at preventing infant sleep problems. Most have included a range of parenting education and strategies, making it difficult to establish if some strategies lead to better outcomes than others. Most interventions have included parent education about normal sleep and sleep cycles, advice to maximise environmental differences between day and night, and strategies to encourage infant self-settling.⁷⁻¹⁰ Strategies included range from the graduated extinction method described above to encouraging parents to stretch night time feed intervals (in the hope that the infant will self-settle) and encouraging the use of parent-independent sleep cues. These trials have shown modest improvements in infant sleep and maternal depression symptoms. Two of these trials have been shown to be most effective in a subgroup of infants who feed less than 3 hourly.^{9,11} Why this is so is unclear but it may be that these infants are more unsettled and are thus fed to sleep more frequently in the hope of improving their sleep. Teaching parents not to feed their

infant to sleep and encourage self-settling instead may reduce development of later sleep problems in this subgroup.

Research Gaps

While modifying parenting to manage and even prevent sleep problems appears effective, a number of research questions remain unanswered. Popular public discourse promotes ‘attachment’ parenting whereby an infant is fed on demand, held for prolonged periods of time and co-sleeps with their parent. Such parenting has been associated with increased night waking at 12 weeks but effects beyond this are less clear.¹² While the parenting strategies evaluated in randomized trials are effective, their short- to medium-term effects on infant well-being as measured by biological markers (e.g., cortisol) are unclear. Fathers are now playing an increasing role in caring for infants and children but their unique contribution to the development and maintenance of sleep problems has not been studied. Finally, parenting strategies work for many but not all children and future research is needed to determine how best to help children whose sleep does not improve with traditional parenting strategies.

Conclusions

Behavioural sleep problems are common in infants and children and their development and maintenance is mediated, in part, by parenting. How a parent settles their child to sleep appears crucial and teaching parents strategies to encourage infant self-settling and implement a bedtime routine appear beneficial. Preventing infant sleep problems through universal programs has a more modest benefit and subgroups of infants (e.g., those feeding less than 3 hourly) may experience a greater benefit. Future research needs to explore the outcomes of attachment-based parenting, impacts of parent-led behavioural strategies on infant well-being, role of fathers, and alternative approaches for infants who do not respond to behavioural parenting practices.

Implications for Parents, Services and Policy

Managing sleep problems in infants and children is exhausting for parents, challenging for clinicians and costly for policy makers. Universal prevention programs providing consistent advice to parents about normal sleep patterns, sleep cues, and ways to encourage infant self-settling (after the first few months) should be widely available. Such programs could be incorporated into well child, universal services and take advantage of the content in evidence-

based websites such as www.raisingchildren.net.au and <http://purplecrying.info/>. Once sleep problems are established, parents need support from a trusted health professional to manage the sleep problem. Parents should be offered a range of evidence-based strategies and choose the best one(s) for their child and their family. Online interventions offering such support look promising and have potential to increase reach and uptake.¹³ Offering advice to parents to take up a more attachment-based parenting style should be tempered by the lack of rigorous data on the effectiveness of this approach to respond to unsettled infant behaviour.¹⁴

References

1. Karyn G. France and Neville M. Blampied. Infant sleep disturbance: Description of a problem behaviour process. *Sleep Medicine Reviews* 1999;3(4): 265–280.
2. Avi Sadeh, Liat Tikotzky, Anat Scher. Parenting and infant sleep. *Sleep Medicine Reviews* 2010;14(2):89–96.
3. Hiscock H, Wake M. Infant sleep problems and postnatal depression: a community-based study. *Pediatrics* 2001;107(6):1317–1322.
4. Giallo R, Rose N, Vittorino R. Fatigue, wellbeing and parenting in mothers of infants and toddlers with sleep problems. *J Reproductive and Infant Psychol* 2011; 29(3):236–249.
5. Hiscock H, Bayer J, Gold L, Hampton A, Ukoumunne OC, Wake M. Improving infant sleep and maternal mental health: a cluster randomised trial. *Arch Dis Child* 2007;92:952–958.
6. Mindell JA, Telofski LS, Wiegand B, Kurtz ES. A nightly bedtime routine: impact on sleep in young children and maternal mood. *Sleep* 2009;32(5):599–606.
7. St James-Roberts I, Sleep J, Morris S, Owen C, Gillham P. Use of a behavioral program in the first 3 months to prevent infant crying and sleeping problems. *J Paediatrics and Child Health* 2001;37:289–297.
8. Symon BG, Marley JE, Martin AJ, Norman ER. Effect of a consultation teaching behavior modification on sleep performance in infants: a randomized controlled trial. *Med J Aust.* 2005;182(5):215–218.
9. Hiscock H, Cook F, Bayer J, Le HND, Mensah F, Cann W, Symon B, St James Roberts I. Preventing early infant sleep and crying problems and postnatal depression: A randomized trial. *Pediatrics* 2014 Feb;133(2):e346–354. doi: 10.1542/peds.2013-1886. Epub 2014 Jan 6.
10. Pinilla T, Birch L. Help me make it through the night : Behavioral entrainment breast-fed infants' sleep patterns. *Pediatrics* 1993;91:436–44.
11. Nikolopoulou M, St James-Roberts I. Preventing sleeping problems in infants who are at risk of developing them. *Arch Dis Child.* 2003;88:108–11.
12. St James-Roberts I, Alvarez M, Csipke E, Abramsky T, Goodwin J, Sorgenfrei E. Infant crying and sleeping in London, Copenhagen and when parents adopt a “proximal” form of care. *Pediatrics* 2006;117(6):1146–55.
13. Mindell, JA, Du Mond, CE, Sadeh, A, Telofski, LS, Kulkarni, N, & Gunn, E. Efficacy of an internet-based intervention for infant and toddler sleep disturbances. *Sleep* 2011;34(4):451.
14. Fisher J, Rowe H, Hiscock H, Jordan B, Bayer J, Colahan A, Amery V. Understanding and responding to unsettled infant behaviour. A Discussion paper for the Australian Research Alliance for Children and Youth. 2011. Available at: <http://www.aracy.org.au/publications-resources/area?command=record&id=123&cid=6>. Last accessed December 4, 2014.