

# **FATHER - PATERNITY**

# The Impact of Fathers on Children

<sup>1</sup>Peter B. Gray, PhD, <sup>2</sup>Kermyt G. Anderson, PhD

<sup>1</sup>University of Nevada, Las Vegas, USA, <sup>2</sup>University of Oklahoma, USA October 2015

#### Introduction

Fathers are acknowledged as important influences on children in every society. What fathers do varies with respect to social context, which in turn shapes the variable impacts that fathers have on their children. Much of contemporary social science and policy research is concerned with fathers' impacts on children's socioemotional development.<sup>1,2</sup> Yet material contributions made by fathers ("breadwinning") remain central to an array of impacts on children,<sup>3</sup> including with respect to children's educational attainment and prospects for social success. Our aim in this entry is to briefly touch on the various impacts fathers have on their children.

#### Subject

Involved fathering is a defining characteristic of our species, with different features having evolved at different times and in different contexts.<sup>4,5</sup> Yet paternal behaviours and roles also vary across and within sociocultural contexts, in turn yielding an array of influences on children.<sup>3,6,7</sup> Fathers may provide protection, material resources (e.g., salary, livestock, inheritance), direct care (e.g., changing diapers, physical play), indirect care (such as arranging marriages in some cultures) and may serve as social models. Impacts on children may be measured in terms of fertility (number of children), survival and health, educational attainment, socioemotional development (e.g., emotional capacity, language development) and reproductive parameters (e.g., children's partnerships and fertility), among other outcomes.

#### Problems

While some scholars have decried how important two-parent families are to children's emotional and behavioural regulation,<sup>8</sup> others have suggested fathers' services are quite substitutable and without much measurable impact.<sup>9</sup> Such polarized views illustrate the challenges of specifying the key impacts of fathers on children, when and why they emerge, and how discussions can unfold without overly simplifying the complicated realities witnessed firsthand by service providers and scholars of interdisciplinary backgrounds and interests.

Moreover, a key problem in understanding the impacts of fathers on children is methodological: most studies are correlational and of unclear generalizability. A few longitudinal prospective studies provide rigorous insight but often at the expense of simplification of concepts (variables) in a limited number of countries. Experimental interventions (e.g., of assessing impacts of an obesity intervention on fathers<sup>10</sup>) are rare, limiting the degree to which causal inference can be clearly drawn. Meta-analyses help in establishing robust patterns, but studies often use very different measures of both paternal involvement and children's outcomes, making comparisons difficult.

#### **Research Context**

Different disciplines and areas of practice have often had distinct interests in fathers and children. Applied social services may be concerned with the impacts of father absence on children's social development (including juvenile delinquency and engagement in criminal activities), on the reasons why men do or do not provide child support, or the role of father figures in child physical abuse. Other policy-oriented scholars may be interested in socially engineering more invested fathers with an eye toward enhancing child outcomes, such as increased high school graduation rates. Sociologists may be primarily concerned with socioeconomic and ethnic differences in father-child dynamics within Western countries. Evolutionary-minded scholars seek to understand the historical and adaptive bases of paternal behaviour and child development, including with respect to other animals. Anthropologists may pay more attention to the role of fathers in non-Western societies.

## **Key Research Questions**

What are the impacts of fathers on children?

How do those impacts vary by social context?

How do changing family dynamics shape fathers' roles and influences on children's development?

What are the mechanisms by which fathers impact children?

Has the increase of unmarried cohabiting fathers as well as multipartnered fertility (having children with multiple partners) altered men's impact on children's outcomes?

## **Recent Research Results**

The impacts of fathers on children can begin before birth (see<sup>11</sup>). Fathers may have heritable physiological impacts on their children via genetic and epigenetic mechanisms that begin to emerge shortly after conception<sup>12</sup> and which may influence maternal investment during pregnancy.<sup>13</sup> Older fathers tend to transmit more mutations to their offspring,<sup>14</sup> while early childhood paternal stressors predict children's adolescent gene methylation patterns (a type of chemical modification of DNA).<sup>15</sup>

The presence of fathers has mixed effects on their children's survival.<sup>16</sup> Oral histories from smallscale societies suggest that fathers help protect their children against enemy threats,<sup>17</sup> while in the U.S., having no father listed on the birth certificate increases the odds of infant mortality.<sup>18</sup> A primary risk factor for child abuse or infanticide in contemporary countries as well as smaller-scale societies is the presence of an unrelated male stepfigure, such as a boyfriend, reminding us that father figures' impacts on children can be deleterious too.<sup>19,20</sup>

An evolutionary perspective suggests that father involvement has been important in the increased fertility of human hunter-gatherers compared with the other great apes.<sup>21-23</sup> That observation contrasts, however, with a world today where fertility levels are plummeting in most countries, with fathers typically investing large amounts of resources and care in few offspring over prolonged periods.<sup>6,24</sup> In this latter case, the time and resources provided by fathers may help develop a child's social and educational capital, in turn helping him/her succeed socially as an adult.<sup>25</sup>

Fathers have an array of impacts on children's socioemotional outcomes.<sup>2,26</sup> Studies testing for these potential types of influences have considered both dichotomized father absence/presence and more continuous assessments of paternal care. Cautions in drawing conclusions in this literature include the challenges to isolate specific paternal influences on specific childhood outcomes, given the multitude of potential covarying factors.

A variety of studies suggest that fathers' engagement positively impacts their children's social competence,<sup>27</sup> children's later IQ<sup>28</sup> and other learning outcomes.<sup>29</sup> The effects of fathers on children can include later-life educational, social and family outcomes.<sup>1,2,26</sup> Children may develop working models of appropriate paternal behaviour based on early childhood cues such as father presence,<sup>30,31</sup> in turn shaping their own later partnering and parenting dynamics, such as more risky adolescent sexual behaviour<sup>32</sup> and earlier marriage.<sup>33</sup> Paternal engagement decreases boys' negative social behaviour (e.g., delinquency) and girls' psychological problems in early adulthood. <sup>34</sup> Fathers' financial support, apart from engagement, can also influence children's cognitive development.<sup>35</sup>

While father absence has been associated with a host of negative children's outcomes, including increased risk of dropping out of school and lower educational attainment, poorer physical and mental health, and behavioural problems,<sup>36-40</sup> higher levels of involvement by nonresident fathers may assuage the negative effects of father absence on children's outcomes.<sup>41,42</sup> Quality of the parents' relationship before divorce, or of the pre-divorce father/child relationship, can also be an important factor: children fare worse following divorce when pre-divorce relationships were good and fare better when pre-divorce relationships were poor,<sup>43,44</sup> suggesting children are sometimes better off without a father if the father's relationship to the child or the mother was not good. The growing trend in multipartnered fertility, along with high rates of nonmarital births, means that many men are fathering children from multiple women at a distance,<sup>45,46</sup> a trait that is associated with greater externalizing behaviours and poorer health among children.<sup>47</sup>

Effects of children on fathers vary with respect to attributes of fathers and of children. Boys whose fathers engaged in physical play but without excessive direction were rated as more popular by their teachers.<sup>48</sup> Effects of fathers may vary across children's ages, with fathers of adolescent sons frequently playing important roles in those son's transitions, as seen among Arnhem land Australian aborigines.<sup>49</sup> Among the Aka hunter-gatherers of Central African Republic, males of varying ages report that they predominantly learned subsistence and social behavioural norms from their fathers.<sup>50</sup>

Stepfathers are widespread not only in modern industrial societies but also in subsistence-level societies as well.<sup>6,51,52</sup> Many studies have found that, compared with resident biological fathers, stepfathers invest less in the children who live with them, both in the United States<sup>37,39,53</sup> and other cultures.<sup>54-56</sup> Stepchildren are more likely to have emotional and behavioural problems than resident genetic offspring,<sup>39,40</sup> although there is evidence that children who have close relationships with their stepfathers have better outcomes.<sup>41,57</sup>

Gay fathers tend to be economically well-off, one means by which their children may garner social advantages relative to other children, while additional research has shown that children of gay fathers did not report differences in sex-typed behaviour compared with parents of other family configurations.<sup>58</sup> A large literature shows that parents tend to transmit values to their children along socioeconomic status lines, with middle class parents typically imparting different values from parents in lower socioeconomic strata.<sup>59,60</sup> However, little of this work has examined fathers in particular, as distinct from mothers.

#### **Research Gaps**

Global interconnectedness, including in the patient pool faced by clinicians and constituents served by policymakers, also means that more research on the cultural scope of fathering and its impact on children is warranted. For example, how do immigrant children fare when faced with a new social context to which their fathers' cultural values and behaviours must be adapted? How do cohabiting fathers differ from married fathers, and does their respective involvement with children impact children differentially? How does the growing trend in multipartnered fertility impact children? Much of our understanding on fathers and children's outcomes stems from cross-sectional or retrospective studies; we need more large, prospective studies, especially internationally, with greater ability to address causal inference. Lastly, as some men are pursuing fatherhood at later ages than ever, men with multiple partners may have children the same age as their grandchildren. What are the effects of aging fathers on children's outcomes?

#### Conclusions

Despite the increase in nonmarital childbearing and subsequent increase in nonresidential fathers, men continue to play important roles in their children's lives. Fathers can influence their children by providing direct care, as well as indirectly through financial support and social modelling. Father involvement has impacts which begin prenatally and extend through the child's life course. Men's investment in offspring can influence offspring survival, health, socioemotional outcomes, social competence, and educational attainment. Much of the research examining the impacts of fathers on children has compared father-absent versus father-present households, rather than degrees of father involvement. The literature shows that father absence tends to correlate with poorer children's outcomes, including lower education attainment, poorer health, greater emotional and behavioral problems, with effects lasting well into adulthood (as measured by socioeconomic status and marital patterns). However, it is unclear to what extent self-selection has biased these studies, as men who remove themselves from a child's residence may differ in many unobserved ways from men who choose to remain.

#### Implications for Parents, Services and Policy

Human families, including roles of fathers, can be quite flexible: we should neither be too fixated on the effects of one caregiver (fathers) nor dismissive of the effects of these same fathers. We should situate fathers' effects in social and individual context, whereby (say) effects may be more pronounced and important in isolated nuclear families in low-fertility high social capital contexts, but less visible in extended families with higher fertility and more substitutable forms of childcare. Many features of male involvement are structured by the relationship with a child's mother, which can also inform fatherhood intervention policy.<sup>61</sup> Child characteristics (age, sex, disability, personality) vary and are part of variable father-child relations. Direct care can matter, but so does indirect care (such as 'breadwinning'), and both should be considered in assessing effects of fathers on children. The effects of fathers on children encompass a diversity of outcomes (e.g., socioemotional, behavioural risk-taking).

#### References

- 1. Cabrera NJ, Tamis-LeMonda CS, eds. *Handbook of father involvement: Multidisciplinary perspectives*. New York: Routledge; 2013.
- 2. Lamb ME, ed. The role of the father in child development. New York: John Wiley and Sons; 2010.
- 3. Shwalb DW, Shwalb BJ, Lamb, ME, eds. Fathers in cultural context. New York: Routledge; 2013.
- 4. Geary DC. Evolution and proximate expression of human paternal investment. *Psychological Bulletin* 2000; 126(1):55-77.
- Gray PB, Crittenden AN. Father Darwin: Effects of children on men, viewed from an evolutionary perspective. *Fathering* 2014;12:121-142.
- 6. Gray PB, Anderson KG. *Fatherhood: Evolution and human paternal behavior*. Cambridge, MA: Harvard University Press; 2010.
- 7. Marlowe F. Paternal investment and the human mating system. Behavioural Processes 2000;51(1):45-61.

- 8. Blankenhorn D. *Fatherless America: Confronting our most urgent social problem*. Scranton, PA: HarperCollins Publishers; 1995.
- 9. Hrdy SB. Mothers and others. Cambridge, MA: Harvard University Press; 2009.
- Morgan PJ, Lubans DR, Callister R, Okely AD, Burrows TL, Fletcher R, Collins CE. The 'Healthy Dads, Healthy Kids' randomized controlled trial: efficacy of a healthy lifestyle program for overweight fathers and their children. *International Journal of Obesity* 2011; 35:436-447.
- 11. Champagne FA, Curley JP. Genetics and epigenetics of parental care. In: Royle NJ, Smiseth PT, Kolliker M, eds. *The evolution of parental care*. New York: Oxford University Press; 2012:304-324.
- 12. Soubry A, Hoyo C, Jirtle RL, Murphy SK. A paternal environmental legacy: evidence for epigenetic inheritance through the male germ line. *Bioessays* 2014;36(4):359-371.
- 13. Haig D. Genetic conflicts in human pregnancy. Quarterly Review of Biology 1993;68:495-532.
- 14. Kong A, Frigge ML, Masson G, Besenbacher S, Sulem P, Magnusson G et al. Rate of de novo mutations and the importance of father's age to disease risk. *Nature* 2012;488(7412):471-475.
- 15. Essex MJ, Thomas Boyce W, Hertzman C, Lam LL, Armstrong JM, Neumann S et al. Epigenetic vestiges of early developmental adversity: childhood stress exposure and DNA methylation in adolescence. *Child Development* 2013;84(1):58-75.
- 16. Sear R, Mace R Who keeps children alive? A review of the effects of kin on child survival. *Evolution and Human Behavior* 2008;29:1-18.
- 17. Sugiyama MS. Fitness costs of warfare for women. Human Nature 2014;25(4):476-495.
- Gaudino JA, Jenkins B Rochat RW. No fathers' names: A risk factor for infant mortality in the state of Georgia, USA. Social Science and Medicine 1999;48:253-265.
- 19. Daly M, Wilson M. The truth about Cinderella: A Darwinian view of parental love. New Haven: Yale University Press; 1998.
- 20. Daly M, Wilson M. Homicide. Hawthorne, New York: Aldine; 1988.
- 21. Kramer KL. Cooperative breeding and its significance to the demographic success of humans. *Annual Review of Anthropology* 2010;39:417-436.
- 22. Lancaster JB, Lancaster CS. Parental investment: the hominid adaptation. In: Ortner D, ed. How humans adapt: A biocultural odyssey. Washington, D.C.: Smithsonian; 1983:33-56.
- 23. Marlowe F. The Hadza hunter-gatherers of Tanzania. Berkeley CA: University of California Press; 2010.
- 24. Kaplan H, Hill K, Lancaster J, Hurtado AM. A theory of human life history evolution: diet, intelligence, and longevity. *Evolutionary Anthropology* 2000;9(4):156-185.
- 25. Kaplan H. A theory of fertility and parental investment in traditional and modern human societies. *American Journal of Physical Anthropology* 1996;101(S23):91-135.
- 26. Flouri E, ed. Fathering and child outcomes. Hoboken: John Wiley and Sons; 2005.
- 27. Leidy MS, Schofield TJ, Parke RD. Fathers' contributions to children's social development. In: Cabrera NJ, Tamis-Lemonda CS, eds. Handbook of father involvement: Multidisciplinary perspectives, 2<sup>nd</sup> ed., 2013:151-167.
- 28. Nettle D. Why do some dads get more involved than others? Evidence from a large British cohort. *Evolution and Human Behavior* 2008;29(6):416-423.
- 29. McWayne C, Downer JT, Campos R, Harris RD. Father involvement during early childhood and its association with children's early learning: A meta-analysis. *Early Education & Development* 2013;24(6):898-922.

- 30. Belsky J, Steinberg L, Draper P. Childhood experience, interpersonal development, and reproductive strategy: An evolutionary theory of socialization. *Child development* 1991;62(4):647-670.
- 31. Draper P, Harpending H. Father absence and reproductive strategy: An evolutionary perspective. *Journal of Anthropological Research* 1982;38(3):255-273.
- 32. Ellis BJ, Schlomer GL, Tilley EH, Butler EA. Impact of fathers on risky sexual behavior in daughters: A genetically and environmentally controlled sibling study. *Development and Psychopathology* 2012;24(01):317-332.
- 33. Nettle D, Coall DA, Dickins TE. Birthweight and paternal involvement predict early reproduction in British women: evidence from the National Child Development Study. *American Journal of Human Biology* 2010;22(2):172-179.
- 34. Sarkadi A, Kristiansson R, Oberklaid F, Bremberg S. Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies. *Acta Paediatrica* 2008;97(2):153-158.
- 35. Argys LM, Peters HE, Brooks-Gunn J, Smith JR. The impact of child support on cognitive outcomes of young children. *Demography* 1998;35(2):159-173.
- 36. Amato PR. The consequences of divorce for adults and children. Journal of Marriage and the Family 2000;62:1269-1287.
- 37. Anderson KG, Kaplan H, Lancaster JB. Paternal care by genetic fathers and stepfathers I: Reports from Albuquerque men. *Evolution and Human Behavior* 1999;20:405-431.
- 38. Biblarz TJ, Gottainer G. Family structure and children's success: A comparison of widowed and divorced single-mother families. *Journal of Marriage and the Family* 2000;62:533-548.
- 39. Hofferth S. Residential father family type and child well-being: Investment versus selection. Demography 2006;43:53-77.
- 40. Mott FL, Kowaleski-Jones L, Menaghan EG. Paternal absence and child behavior: Does a child's gender make a difference? Journal of Marriage and Family 1997;59:103-118.
- 41. Amato PR, Gilbreth JG. Nonresident fathers and children's well-being: A meta-analysis. *Journal of Marriage and the Family* 1999;61:557-573.
- 42. King V, Sobolewski JM. Nonresident fathers' contributions to adolescent well-being. *Journal of Marriage and Family* 2006;68:537-557.
- 43. Booth A, Amato PR. Parental predivorce relations and offspring postdivorce well-being. *Journal of Marriage and the Family* 2001;63:197-212.
- 44. Strohschein LA. Parental divorce and child mental health trajectories. Journal of Marriage and Family 2005;67:1286-1300.
- 45. Guzzo KB, Furstenberg Jr FF. Multipartnered fertility among American men. Demography 2007;44:583-601.
- 46. Kennedy S, Bumpass L. Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research* 2008;19:1663-1692.
- 47. Bronte-Tinkew J, Horowitz A, Scott ME. Fathering With multiple partners: Links to children's well-being in early childhood. *Journal of Marriage and Family* 2009;71(3):608–631.
- Leidy MS, Schfield TJ, Parke RD. Fathers' contributions to children's social development. In: Cabrera NJ, Tamis-Lemonda CS, eds. Handbook of Father Involvement, 2<sup>nd</sup> ed., New York: Routledge; 2013:151-167.
- 49. Scelza BA. Fathers' presence speeds the social and reproductive careers of sons. *Current Anthropology* 2010;51(2):295-303.
- 50. Hewlett BS, Fouts HN, Boyette AH, Hewlett BL. Social learning among Congo Basin hunter-gatherers. *Philosophical Transactions of the Royal Society B: Biological Sciences* 2011;366(1567):1168-1178.
- 51. Hewlett BS. Intimate fathers: The nature and context of Aka Pygmy paternal infant care. Ann Arbor, MI: University of Michigan Press; 1991.

- 52. Sugiyama LS, Chacon, R. Juvenile responses to household ecology among the Yora of Peruvian Amazonia. In B. S. Hewlett and M. E. Lamb, eds. *Hunter-Gatherer childhoods: Evolutionary, developmental and cultural Perspectives*. New Brunswick, CT: Aldine Transaction; 2005:237-261.
- 53. Hofferth S, Anderson KG. Are all dads equal? Biology vs. marriage as basis for paternal investment in children. *Journal of Marriage and Family* 2003;65:213-232.
- 54. Anderson KG, Kaplan H, Lam D, Lancaster JB. Paternal care by genetic fathers and stepfathers II: Reports by Xhosa high school students. *Evolution and Human Behavior* 1999;20:433-451.
- 55. Flinn MV. Step- and genetic parent/offspring relationships in a Caribbean village. *Ethology and Sociobiology* 1988;9:335-369.
- 56. Marlowe F. Male care and mating effort among Hadza foragers. Behavioral Ecology and Sociobiology 1999;46:57-64.
- 57. White L, Gilbreth JG. When children have two fathers: Effects of relationships with stepfathers and noncustodial fathers on adolescent outcomes. *Journal of Marriage and Family* 2001;63:155-167.
- 58. Golombok S, Mellish L, Jennings S, Casey P, Tasker F, Lamb ME. Adoptive gay father families: Parent-child relationships and children's psychological adjustment. *Child Development* 2014;85(2):456-468.
- 59. Kohn M, Schooler C. Work and personality: An inquiry into the impact of social stratification. Norwood, NJ: Ablex; 1983.
- 60. Weininger EB, Lareau A. Paradoxical pathways: An ethnographic extension of Kohn's findings on class and childrearing. *Journal of Marriage and Family* 2009;71(3):680–695.
- 61. Panter-Brick C, Burgess A, Eggerman M, McAllister F, Pruett K, Leckman JF. Practitioner review: Engaging fathers-recommendations for a game change in parenting interventions based on a systematic review of the global evidence. *Journal of Child Psychology and Psychiatry* 2014;55(11):1187-1212.