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Development

Parental leave

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Synthesis

How Important Is It?

Parental leave policies were developed in response to increasing numbers of women participating in the labour market and out of concern for the health and well-being of both mother and infant.

In Canada (2001 statistics):

- 60% of women with children under three years of age were employed;[1]
- 85% of Canadian mothers and nearly as many fathers (employed full-time) felt there were not enough hours in the day.[2]

Typically, national policies include a period of job-protected leave and some degree of replacement (benefits) in order to take time off from work following the birth or adoption of a child.

For example, in 2000, Sweden was providing 12 weeks of maternity leave (100% of wages replaced) and 18 months of parental leave (80% of earnings for 1 year); Norway was providing from 42 to 52 weeks of parental leave (100% of earnings for 42 weeks, 80% for 52 weeks); Italy, 21 weeks of maternal leave (at 80% of earnings) and 10 months of parental leave (30% of earnings); Denmark was allowing 18 weeks of maternity leave (100% of earnings) and 10 weeks for each parent as parental leave (paid full-time). In Canada, 12 months of partially paid maternity and parental leaves were available; in the U.S., 12 weeks of unpaid leave were offered to those who were eligible (firms with 50 or more workers)[3].

In Canada (2001 statistics):

- 61% of new mothers were receiving maternity or parental leave benefits;[4]
- 10% of husbands claimed or planned to claim paid parental benefits.[4]

What Do We Know?

Prenatal & Perinatal Stress

It is difficult to establish, measure and define causal links between maternal stress and anxiety during pregnancy and birth outcomes. Pregnant women assess their levels of stress according to a variety of factors, such as their personality type, disposition and whether the source of their stress is perceived as internal or external.

Stress during pregnancy has been linked to various developmental outcomes in children: reduced early attention and motor maturity, slower learning and impaired emotion regulation in offspring. Research also indicates that stress is not always harmful and that a certain degree of stimulation and activation may be beneficial for development. In addition, maternal depression after pregnancy is a significant risk factor linked to adverse psychosocial outcomes in children. The implications of maternal stress on the postnatal environment may be of greater consequence than the biological effects of prenatal exposure.

Parental Leave

Studies on parental leave and children's well-being suggest that early maternal employment (within the child's first year of life):

- is associated with increased behaviour problems in children (at age four);
- is associated with slightly lowered scores in measures of language, cognitive development and academic achievement in later years;
- may be disadvantageous for children from middle- to upper-income two-parent families; and beneficial for children from low-income and single-mother households on measures of language and cognitive development at age four.

Additional studies have demonstrated that paid leave is associated with reduced rates of infant and child mortality, and maternal health and well-being are more strongly associated with the mother's role satisfaction and the support received from spouse and society.

What Can Be Done?

Currently, more than 100 nations have established some form of maternity or parental leave policy. Existing parental leave policies vary in length and financial support.

Researchers recognize three key issues around policy leave:

- eligibility criteria for qualifying for a leave;
- duration of leave;
- level of benefits.

These issues and other factors, such as the type and availability of quality child care, significantly affect the duration of leave. Mothers have additional concerns, including the nature of their occupation (e.g. self-employed), employer-provided benefits, return-to-work options, job security and career advancement. There is evidence that women who take maternity or parental leaves may experience negative financial consequences.

Additional studies focusing on parental leave programs that offer options such as those available in European countries are needed. Key areas of further research include:

- Why do women return to work early?
- Why do most men not take parental leave?
- What determines how long a mother or father will take a leave?
- How can we normalize leave-taking for both mothers and fathers?
- What can organizations do to assist parents to balance work and family?

Parental leave is only one component in a set of policies and supports developed to help parents balance competing work and family demands. Examination should not be limited to social policies (i.e. maternity and parental leaves), but include reviews and assessments of employment structures, employee performance rewards and support in the workplace (scheduling flexibility, breastfeeding accessibility, quality child care facilities). Additional research could help to determine how workplaces, communities and governments can respond to enhance the positive long-term development of healthy families and children.

References

1. Statistics Canada. Health indicators. Life stress. Available at: http://www.statcan.ca/english/freepub/82-221-XIE/2004002/nonmed/personal3.htm. Accessed April 27, 2005.
2. Statistics Canada. The people: Household and family life: Stress. In: Statistics Canada. *Canada e-book*. Ottawa, Ontario: Statistics Canada; 2003. Available at: http://www43.statcan.ca/02/02d/02d_005_e.htm. Accessed April 27, 2005.
3. OECD. S*tarting strong – Early childhood education and care*. Paris, France: OECD; 2001.

4. Marshall K. Benefiting from extended parental leave. *Perspectives on Labour and Income* 2003;15(2):16. Statistics Canada, Cat. No. 75-001-XPE.

The Effects of Parental Employment and Parental Leave on Child Health and Development

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Introduction

The first years of life are recognized as a critical period for children.[1,2] Since, increasingly, young children are raised in families where mothers work, parents may have less time and energy to invest in their offspring. Parental leave is therefore an important accommodation, designed to increase the ability of families to balance the needs of the workplace and home. Considerable research has recently examined the effects of maternal employment during these early years. (Paternal employment has seldom been studied.) Conversely, although the effects of family leave policies on labour market outcomes has received some attention, much less is known about the relationship between leave entitlements and child health.

Subject

Between 1980 and 1998, the labour force participation rate of mothers in the United States with children under the age of 6 grew from 47% to 65%.[3] The increase was even larger for women with infants, rising from 38% to 59% during the same period.[4] These changes, combined with the growth in single-parent households, suggest that parents have less time and energy to invest in their offspring. Since the dramatic rise in employment among mothers with very young children is unlikely to be reversed in the near future, there is considerable interest in the development of *family-friendly* labour market policies, such as parental leave. Over 100 countries, including virtually all industrialized nations, have adopted parental leave policies.[5] Most insure women the right to at least two or three months of paid leave around the time of childbirth. By contrast, the US did not require companies to provide leave until 1993, when firms were mandated to offer 12 weeks of *unpaid* leave to persons with qualifying employment histories, following the birth of a child or for a variety of health problems. Proponents of these entitlements believe that they improve the health of children and the position of women in the workplace and need to be legislated because the market provides sub-optimal periods of leave. Opponents counter that

mandated entitlements reduce economic efficiency by restricting open-door discussions/exchanges between employers and employees, and may therefore have particularly adverse effects on women's labour market opportunities.

Problems

It is difficult to measure how maternal employment or the use of parental leave affects children. The biggest problem is that mothers who work or take leave when their children are young are likely to differ from those who do not. For example, Vandell & Ramanan[6] show that such employment is more common for women with high levels of education and cognitive skills. Indeed, if working mothers are highly skilled both at home and in market activities, being employed is likely to be correlated with positive child outcomes, even though there is no causal effect per se. Conversely, a spurious negative correlation could arise when women returning to work soon after they give birth are more *career-oriented* and have less interest or ability in home production. Eliminating or substantially reducing the biases that result from inadequate controls for these sources of heterogeneity is a key challenge in this area of research.

Research Context

Recent research emphasizes the long-lasting effects of early environmental influences on brain development.[7] Environmental factors are also likely to be significant in the formation of learning skills, self-esteem, and emotional security. For instance, Heckman[8] stresses the importance of human capital investments in early childhood, focusing on the role of dynamic complementarities whereby early skill development fosters subsequent learning. Psychological and sociological literature emphasizes further, generally complementary, pathways through which parental investments may affect children. Belsky[9] argues that a mother's absence during the first year of life could disrupt mother-child attachment and deprive the child of the stimulation that promotes cognitive development. Hoffman[10] states that the stress of maternal employment may yield fewer and lower-quality interactions with children. Coleman[11] expresses concern that job-holding mothers are diminishing our *social capital,* which is founded on women's emotional investment in building relationships with their children, at home.

Key Research Questions

Important research questions in this area include the following:

1. Does parental employment during the first years of children's lives affect their cognitive, health or socio-emotional development during pre-school and early school years?
2. Does the availability and use of parental leave mitigate or reinforce its effects on each of these (aforementioned) outcomes?
3. Do the results of leave taking and parental employment vary according to factors such as race, education, or marital status?

Recent Research Results

There has been a wealth of research on the effect of maternal employment on child outcomes (particularly in the area of cognitive development). However, until recently, few studies have taken care to control for non-random selection in job-holding or work hours. The best analyses conducted[12-14] in the early part of the past decade suggested that early maternal employment (during a child's infancy) had modest negative effects but with offsetting benefits from working during the child's second and third years. Recent analyses using more extensive controls and sophisticated statistical methods of accounting for heterogeneity[15-18] have suggested that early maternal employment may have more deleterious effects. Specifically, the negative effects of women working during a child's first year of life appeared to be more pronounced than previously thought and the benefits of working during the next two years were either non-existent or not as great as shown in previous studies. Although these results highlight the potential usefulness of policies such as parental leave, only two studies examined whether family leave was associated with improved child health. Both provided evidence of possible benefits. Winegarden and Bracy[19] found that entitlement to paid leave is negatively correlated with infant mortality rates. However, the estimated effects were implausibly large and were sensitive to the treatment of wage replacement during time off work. A more in-depth study by Ruhm[20] confirmed that paid leave was associated with reductions of the death rates among infants and young children. Furthermore, Ruhm has estimated that paid leave is likely to have a much stronger negative effect on post-neonatal mortality and deaths between the first and fifth birthday than on perinatal or neonatal mortality. This pattern could be anticipated if parental leave was found to have a causal impact.

Conclusions

Parental presence during the early years constitutes a significant investment in child development. Recent research has begun to clarify the role that parents play with particular

emphasis on the importance of their presence during infancy. For example, maternal employment during a child's first year appeared to negatively affect subsequent cognitive test scores and was associated with increases in behavioural problems. Results were more ambiguous for employment in the second and third years, although some deleterious consequences were observed in cases where mothers worked long hours at their jobs. These findings appeared to indicate that there were significant potential benefits to parental leave rights following childbirth. But only a few studies have been conducted on this subject. We also know relatively little about how the effects of maternal employment or parental leave differ depending on factors such as the sex of the child, household structure, parental education, and the availability of high-quality child care.

Implications

Considerable caution must be exercised in applying these kinds of research findings to the development of policies. Certainly, the importance of parental investments during the first year of life appears to justify the generous and lengthy paid leave policies available in many European countries. By contrast, leave entitlements in the United States are limited and unpaid. However, child development is just one (albeit, very important) concern and we are largely ignorant about the tradeoffs that the various policies may entail. For instance, rights to many months of maternity leave may negatively affect labour market opportunities for some women. We also need a better understanding of the mechanisms by which parental investments produce improved outcomes. Maternal employment, for example, is associated with decreases in the frequency and duration of breast-feeding.[21-24] Since the consumption of human milk is linked to better health and possibly enhanced cognitive development, returning to work during the first year of a child's life may not be a desirable option for mothers. This said, it is important to determine if the benefits of parental leave entitlements could be also achieved more inexpensively in other ways, such as through policies that make it easier for employed women to nurse their infants.

References

1. Carnegie Task Force on Meeting the Needs of Young Children. *Starting Points: Meeting the Needs of Our Youngest Children: the report of the Carnegie Task Force on Meeting the Needs of Young Children*. New York, NY: Carnegie Corporation of New York; 1994.
2. Council of Economic Advisers. *The First Three Years: Investments that Pay*. Washington, DC: Council of Economic Advisers, Executive Office of the President; April 17, 1997.
3. U.S. Census Bureau. *Statistical Abstract of the United States: 1999* (119th ed.) Washington, DC: US Government Printing Office; 1999.
4. Bachu A, O'Connell M. Current Population Report. *Fertility of American Women: June 1998*. Washington, DC: US Census Bureau; September 2000. P20-526.

5. Kamerman SB. Child Care Policies and Programs: An International Overview. *Journal of Social Issues* 1991;47(2):179-196.
6. Vandell DL, Ramanan J. Effects of Early and Recent Maternal Employment on Children from Low-Income Families. *Child Development* August 1992;63(4):938-949.
7. Shore R. *Rethinking the Brain: New Insights Into Early Development*. New York: Families and Work Institute; 1997.
8. Heckman JJ. Policies to Foster Human Capital. *Research In Economics* 2000;54(1):3-56.
9. Belsky J. The 'Effects' of Infant Day Care Reconsidered. *Early Childhood Research Quarterly* 1988;3(3):235-272.
10. Hoffman LW. The Effects of Maternal Employment on the Academic Attitudes and Performance of School-Aged Children. *School Psychology Review* 1980;9(4):319-335.
11. Coleman JS. Social Capital and the Creation of Human Capital. *American Journal of Sociology* 1988;94(suppl):s95-s120.
12. Desai S, Chase-Lansdale PL, Michael RT. Mother or Market? Effects of Maternal Employment on the Intellectual Ability of 4-Year Old Children. *Demography* 1989;26(4):545-561.
13. Blau FD, Grossberg AJ. Maternal Labor Supply and Children's Cognitive Development. *Review of Economics and Statistics* 1992;74(3):474-481.
14. Parcel TL, Menaghan EG. Early Parental Work, Family Social Capital, and Early Childhood Outcomes. *American Journal of Sociology* January 1994;99(4):972-1009.
15. James-Burdumy, S. *The Effect of Maternal Labor Force Participation on Child Educational Attainment*. [mimeo] Princeton, New Jersey: Mathematica Policy Research, Inc.; 1999.
16. Neidell, MJ. *Early Parental Time Investments in Children's Human Capital Development: Effects of Time in the First Year on Cognitive and Non-cognitive Outcomes.* [mimeo] Los Angeles, CA: University of California at Los Angeles; 2000.
17. Ruhm CJ. *Parental Employment and Child Cognitive Development*. National Bureau of Economic Research; 2000. Working Paper No. 7666.
18. Waldfogel J, Wenjui H, Brooks-Gunn J. The Effects of Early Maternal Employment on Child Cognitive Development. *Demography* 2002;39(2):369-392.
19. Winegarden CR, Bracy PM. Demographic Consequences of Maternal-Leave Programs in Industrialized Countries: Evidence from Fixed-Effect Models. *Southern Economic Journal* 1995;61(4):1020-1035.
20. Ruhm CJ. Parental Leave and Child Health. *Journal of Health Economics* 2000;19(6):931-960.
21. Ryan AS, Martinez GA. Breast-feeding and the Working Mother: A Profile. *Pediatrics* 1989;83(4):524-531.
22. Gielen AC, Fadden RR, O'Campo P, Brown CH, Paige DM. Maternal Employment During the Early Postpartum Period: Effects of Initiation and Continuation of Breast-feeding. *Pediatrics* 1991;87(3):298-305.
23. Lindberg LD. Women's Decisions About Breastfeeding and Maternal Employment. *Journal of Marriage and the Family* February 1996;58(1);239-251.

Research on Parental Leave Policies and Children's Development Implications for Policy Makers and Service Providers

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Introduction and Subject Relevance

Maternity and parental leave policies date back more than 100 years and are now established policy instruments in over 120 nations. Typically, national policies include a period of job-protected leave (averaging 44 weeks across OECD countries) and some degree of income replacement (benefits) in order to enable mothers and (increasingly) fathers to take a period of time off of work following the birth or adoption of a child. Parental leaves and benefits are variously referred to as family policies that protect maternal and infant health; as employment policies that promote gender equity and respect the rights of workers to combine work and family responsibilities; and as "an essential ingredient in early childhood education and care policies."[1-4] Current trends include extending the period of available leave (as per recent changes in Canada, where eligible parents can share up to a full year of maternity and parental leave benefits), promoting paternal leave, and adding more flexible options. Until recently, much of the research in this area has focussed primarily on use patterns and the economic consequences of leave policies. However, there is now considerable interest in the effects of leave policies and leave duration on mothers' physical and mental health and on children's development.

In the US and Canada, most men and women are in the labour force when their first child is born, and about 60% of women who have a child under three years of age are employed.[5] Concerns about parental stress (caused by the difficulties of balancing work and family responsibilities) and about children's well-being (in their earliest years of life) have prompted further consideration regarding how parental leave and benefit policies might be improved, and which complementary policies, programs, and services will best promote child and family well-being. Affordable, high-quality care for young children and flexible workplace practices are critical contextual factors. It is these factors that can enable or constrain parents' options, and ultimately affect young children's experiences at home and in non-parental care arrangements.[6-8]

The purpose of this review is to underscore what we do and do not know about parental leave policies as factors that affect parent–child interactions and young children's development, and to identify potentially helpful complementary policy changes and service approaches.

Problems, Limitations, and Current Research Context

Our review of the empirical literature brought to light various methodological and conceptual problems:

1. There are still relatively few studies that address these concerns, and results are neither consistent nor generalizable outside of the United States, where maternity/parental leave, health care, and child care policies are atypical of the rest of the world's industrialized nations. Prior to 1993, the US had no national maternity or parental leave policy, although some new mothers did obtain financial assistance after childbirth under temporary disability coverage. The *1993 Family and Medical Leave Act* (FMLA) requires employers with 50 or more workers to provide up to 12 weeks of **unpaid** job-protected leave to employees who worked at least 1,250 hours during the previous year. This provision for leave serves a variety of purposes. In addition to promoting care for newborn or newly adopted children, it allows for time off to provide care when an employee or the employee's child, spouse, or elder parent is ill. Evaluation studies indicate that fewer than half of private-sector employees in the US are covered and eligible for this kind of leave. Certainly, the lack of any provision for income replacement is a serious disadvantage to workers.[7] Among all of the FMLA leave takers surveyed in 2000, more than one third received no pay during their longest period of leave; over half of leave takers reported being worried about not having enough money to make ends meet, and just over half stated that they would have taken a longer leave if some additional pay had been available.[8]

   In sum, interpretations of research on parental leave-taking that is largely based on experiences in the US must consider a policy context which, compared with many other countries, results in more limited options for new parents. In many cases, these factors also make returning to work and using alternate child care arrangements more difficult and more conflicted for mothers.

2. A number of recent studies have attempted to determine whether early maternal employment (ie, in the first year of a child's life) affects children's subsequent readiness for school, scholastic achievement, and behavioural adjustments. Sample biases, consideration

of a limited number of intervening variables between infancy and later years, and the fact that the NLSY (the National Longitudinal Survey of Youth), the most widely used longitudinal data set, lacks information about the quality and continuity of child care arrangements greatly limits our capacity to draw meaningful conclusions. (See reference 9for a critical review of the methodological difficulties regarding most of these studies.)

3. A third set of studies, which contains more information about parent and child care variables, were conducted using the Longitudinal Study of Early Child Care and Youth Development, sponsored by the National Institute of Child Health and Human Development (NICHD). To date, this research (begun in 1991) has confirmed the importance of responsive and stimulating parenting **and** quality child care for optimal development in young children — a challenging balance to strike. The majority of mothers who returned to work before their infants were 12 weeks of age were often from low-income households or households in which the mother's wages were critical to her family's economic security.[6]
4. Another set of longitudinal studies that is particularly useful for our current purposes has focussed directly on duration of leave as a factor affecting a mother's physical and mental health and on mother–infant relationships. Some of the findings on this subject are discussed in detail below. Among other things, researchers have noted that a complex set of factors that must be considered when interpreting how decisions about the duration of leave and alternative child care arrangements are made.[10,11]

Key Research Questions

Over the past 20 years, research on child development has revealed a rich and multi-layered ecology of influences. Longitudinal studies have confirmed the fact that many children and families experience major changes in family structure, economic resources, and parental employment. For these reasons, research is bound to be difficult and unsatisfying when it attempts to gage how the timing of a mother returning to work after birth contributes (per se) to children's subsequent developmental outcomes. Other aspects that affect parenting, including the involvement of fathers in their children's lives, sources of parenting stress and family support, workplace factors, and the quality of child care and educational experiences must obviously be considered.

Descriptive and explanatory research that is more specific to parenting during and after maternity/parental leave may provide more useful starting points. This research addresses the

following questions:

- What determines the duration of leave for mothers? What factors determine whether fathers take a leave of absence?
- How does a longer or shorter period of leave affect maternal physical and mental health, infant health, and the quality of parent–child relationships?
- How might public policies, community services and workplace practices be adapted to provide more support and flexibility to parents and ensure optimal development in children?

Recent Research Results

What determines the duration of the leave that parents take?

Multiple factors affect the length of combined maternity and parental leave mothers take; however, existing leave and benefit policies are the dominant factors. Specifically, longer periods of job-protected leave and broader coverage provide more choice and normalize leave-taking within a country. Inadequate income replacement appears to be a major constraint on the duration of leave new mothers take, as evidenced in the US. In Canada, research conducted between 1993 and 1996 revealed that self-employed women who were not eligible for maternity and parental leave and benefits tended to return to work within one month after childbirth, while other new mothers averaged 6.4 months, a leave duration that closely corresponded to the then available period of government-provided maternity and parental leave benefits.[12] In addition to existing policy provisions, mothers were affected by specific employment factors, including the nature of their occupation and responsibilities, the availability of employer-provided benefits and return-to-work options, and their perceptions of how leave-taking would affect their job security and career advancement. Ultimately, leave decisions were personal matters and involved balancing employment issues, financial needs, concerns about the mother’s health, the child’s health, the child’s readiness to be exposed to others, and individual preferences.

Much less is known about leave taking among fathers. What is known is that fathers may take several days off, but often as vacation days, rather than as parental leave. Dominant factors in decisions around leave taking appear to be both financial and employment-related. It has been suggested[13] that some fathers who may wish to take (longer) parental leave must reconcile their desire to be both good providers and involved fathers with workplace cultures that do not support paternal leave-taking.

Parental Leave and Maternal Physical and Mental Health

Maternity leave policies were originally based on legislation designed to protect maternal and infant health. Today, research confirms that both are affected by the duration of maternity/parental leave. Some authors[14] have estimated that full recovery from childbirth can take up to six months or longer, including time for mothers to recover their strength and energy levels and adapt to the new demands of caring for an infant. Others[15] have reflected on the importance having time to establish regular biological rhythms and reciprocal interaction patterns between mothers and infants, through which both became attuned to and attached to each other. Complications in establishing healthy patterns and maternal self-confidence were evident when mothers experienced post-partum depression and/or anxiety, limited spousal and social support, and were returning to work earlier than they wish to. Infant temperament was also a factor that appeared to affected a mother's confidence and concerns about returning to work, and also likely affect her infant's adjustment to child care.[16,10]

Several longitudinal studies have indicated that returning to full-time work after a brief maternity leave was a risk factor that compromised maternal mental health (depression and anxiety), **especially** when shorter leaves coincided with maternal fatigue, poor general health, poor social support, marital concerns, and other risk factors.[17,18] When mothers in the Wisconsin Maternity Leave and Health Study were contacted one year after they had given birth, no significant differences were noted between home-makers, part-time, and full-time employed women in measures of mental health such as depression, anxiety and self-esteem. Moreover, the length of leave taken was not, in itself, a significant contributor to maternal mental health. Interestingly, these researchers and several others have noted that depression was greatest among mothers who preferred to return to work, but who took much longer leaves; or mothers who (for some other reason) chose to stay at home.[10,18,19]

In sum, as Klein and colleagues[20] have suggested, research on maternity leave and mental health generally demonstrates that whether employed or at home, a mother's role quality (the fit between their actual and preferred role, satisfaction with their role, and the support they receive from their spouse and society) is a stronger factor in accounting for mental health than considerations that focus on leave per se. Women who return to work and experience overload and lack of flexibility and support experience anger, distress and depression, and women who are at home but are concerned about role restriction and are depressed are both at significant risk. Further, when an infant is in distress, has a difficult temperament or is ill, it affects mothers and

their ability to adapt to demands, both at work and at home.

Parental Leave and Infant Health

Few studies on mothers who took longer leaves (or who left the labour force altogether) because their infants were in poor health have confirmed that longer leaves were likely to have positive impacts. Based on national data for 16 European countries gathered from 1969 to 1994, Ruhm[21,22] has suggested that longer periods of paid parental leave (but not unpaid leave) are associated with reduced rates of infant mortality.

It is hypothesized that one reason for this association is that longer leave periods may result in longer periods of breastfeeding, as well as greater investments of maternal time in caring for infants. Research has confirmed that women are more likely to stop breastfeeding during the month they return to work. Similarly, returning to work is one of the most common reasons for terminating breastfeeding. Women who return to work on a part-time basis and whose workplaces are more flexible and supportive may be able to support breastfeeding for a somewhat longer duration.[23]

Parental Leave and Early Parenting, Child Care Use and Long-term Developmental Outcomes

The research on early maternal employment, child care, and long-term developmental outcomes is very complex, as would be expected given the multiple influences at play. Clark and her colleagues have made a particularly useful contribution[16] by underscoring the fact that the quality of mother–child interactions is the explanatory factor that intervenes between maternal employment and child development outcomes. Conversely, the quality of mother–infant interactions is affected by individual maternal and infant characteristics, marital quality and support, and by the mix of stressors and protective factors that affect maternal mental health. Therefore, returning to work early is only one factor to be considered since it interacts with so many others. For example, Clark and colleagues[16] found that mothers who were more depressed or who thought their infant had a difficult temperament **and** who took shorter leaves were less likely to be positive, sensitive and responsive with their infants.

Other longitudinal research on early maternal employment and the quality of child care confirm that **both** factors are important within a range of early cognitive and behavioural outcomes. This said, parenting influences predominate over the long term as predictors of attachment and emotional adjustment, and child care factors are perhaps more critical contributors to cognitive

and language development, particularly for children in low-income families.[6] Child care arrangements that are poor and/or unstable may also compromise the quality of parenting at home and the quality of care received from others during the early years.

Lastly, several recent studies have attempted to puzzle out the long-term impacts of maternal employment on children's development using national longitudinal surveys. As described earlier, despite inconsistent findings and relatively small effects, studies suggest that early maternal employment (ie, returning to work within a year of giving birth, and particularly for more than 20 hours per week) slightly lowered scores in measures of language and cognitive development at age 4 and cognitive development and academic achievement scores at ages 7 and 9.[20,21,24-30] Somewhat different patterns have emerged for children in different race and income groups, with common interpretations suggesting that early maternal employment may be beneficial for children in low-income and single-mother households, and disadvantageous for children with mothers who are better educated, in middle- and upper-income two-parent families. This research is limited by the paucity of information available about child care arrangements and, thus far, has failed to consider a range of other important factors that come into play between infancy and later periods.

Conclusions and Implications

As parental leave and benefit policies continue to evolve, there is increased interest in examining their short- and long-term impacts on women, children and families. Opinion research suggests that parents appreciate having the option of taking longer periods of paid leave to spend more time with their newborns. Both leave and benefit provisions are important aspects of these policies. Some studies suggest that longer leaves enable mothers to more fully recover from childbirth and provide more time for mothers and their infants to establish regular, responsive patterns and close attachments. Longer breastfeeding periods may be one additional health benefit. However, there is now strong evidence that the length of leave in and of itself (beyond a minimum of perhaps four months) is not as critical a determinant of maternal mental health or child development outcomes as is the set of personal, family, and workplace stresses, resources, and supports that operate jointly and interact with leave experiences. Together, these factors affect quality of life for mothers, fathers, and infants during a crucial period. Additional research could provide a clearer picture of this complex set of interacting forces and could help identify how workplaces and communities might respond to enhance the positive long-term development of healthy families and children.

Over the past decade trends such as minimal increases in young family incomes, greater employment volatility, and welfare reform initiatives have placed economic pressure on parents to participate in the labour force, even when their children are very young. As we increase our knowledge of the importance of early childhood experiences, we strengthen the impetus to develop more responsive policies, programs and services to support all parents and foster a healthier integration of work and family life. Maternity and parental leave and benefit policies are just one component in a set of public and workplace policies and supports that can help parents reconcile the competing claims of work and family life following the birth or adoption of a child. To date, little research has actually focussed on what new parents do while they are on leave, or how community-based supports might enhance their experience and better prepare them to return to work. Similarly, there is a need for more research into workplace supports that may make returning to work less stressful and more family-friendly. Specific examples could include flexibility in workplace scheduling and gradual reintegration at work, the promotion of breastfeeding, and the provision of reliable, high-quality infant care. Community-based resources could provide a range of parenting programs that could be sensitive to a variety of needs and concerns, including information and support for new parents in planning their return to work and choosing child care arrangements. In addition, it is imperative that policies address the need to expand the availability and affordability of high-quality, affordable child care services (both centre- and home-based) so that parents have peace of mind when they return to work and children benefit from stimulating and sensitive non-parental caregiving arrangements.

References

1. Gauthier AH. Historical trends in state support for families in Europe (post 1945). *Children and Youth Services Review* 1999;21(11-12):937-965.
2. *International Labour Conference (87th). Maternity Protection at Work: Revision of the Maternity Protection Convention (revised), 1952, (No. 103), and the Recommendation, 1952, (No. 95*). Geneva, Switzerland: International Labour Office; 1999.
3. Kamerman SB. From maternity to parental leave policies: Women's health, employment and child and family well-being. *Journal of the American Medical Womens Association* 2000;55(2):96-99.
4. Kamerman SB. Parental leave policies: An essential ingredient in early childhood education and care policies. Society for Research in Child Development. *Social Policy Report* 2000;14(2):3-15.
5. Statistics Canada. *Women in Canada 2000: A gender-based statistical report*: *Target Groups Project.* Ottawa: Statistics Canada, Housing, Family and Social Statistics Division; 2000.
6. Phillips D, Adams G. Child care and our youngest children. *The Future of Children* 2001;11(1):35-51.
7. Waldfogel J. International policies toward parental leave and child care. *The Future of Children* 2001;11(1):99-111.
8. Waldfogel J. *Family and medical leave: Evidence from the 2000 surveys*. New York, NY: Mimeo, Columbia University; 2001.

9. Harvey E. Short-term and long-term effects of early parental employment on children of the National Longitudinal Survey of Youth. *Developmental Psychology* 1999;35(2):445-459.
10. McKim MK, Cramer KM, Stuart B, O'Connor DL. Infant care decisions and attachment security: The Canadian Transition to Child Care Study. *Canadian Journal of Behavioural Science- Revue canadienne des sciences du comportement* 1999;31(2):92-106.
11. Lyness KS, Thompson CA, Francesco AM, Judiesch MK. Work and pregnancy: Individual and organizational factors influencing organizational commitment, time of maternity leave and return to work. *Sex Roles* 1999;41(7-8):485-508.
12. Marshall K. Employment after childbirth. *Perspectives on Labour and Income* 1999;11(3):18-25.
13. Hyde JS, Essex MJ, Horton F. Fathers and parental leave: Attitudes and experiences. *Journal of Family Issues* 1993;14(4):616-638.
14. Tulman L, Fawcett J. Factors influencing recovery from childbirth. In: Hyde JS, Essex MJ, eds. *Parental Leave and Child Care: Setting a Research and Policy Agenda*. Philadelphia, PA: Temple University Press; 1991:294-304.
15. Weinraub M, Jaeger J. Timing the return to the workplace: Effects on the developing mother–infant relationship. In: Hyde JS, Essex MJ, eds. *Parental Leave and Child Care: Setting a Research and Policy Agenda*. Philadelphia, PA: Temple University Press; 1991:307-322.
16. Clark R, Hyde JS, Essex MJ, Klein MH. Length of maternity leave and quality of mother-infant interactions. *Child Development* 1997;68(2):364-383.
17. Gjerdingen DK, Chaloner KM. The relationship of women's postpartum mental health to employment, childbirth, and social support. *Journal of Family Practice* 1994;38(5):465-472.
18. Hyde JS, Klein MH, Essex MJ, Clark R. Maternity leave and women's mental health. *Psychology of Women Quarterly* 1995;19(2):257-285.
19. Hock E, DeMeis DK. Depression in mothers of infants: The role of maternal employment. *Developmental Psychology* 1990;26(2):285-291.
20. Klein MH, Hyde JS, Essex MJ, Clark R. Maternity leave, role quality, work involvement, and mental health one year after delivery. *Psychology of Women Quarterly* 1998;22(2):239-266.
21. Ruhm CJ. Parental leave and child health. *Journal of Health Economics* 2000; 19(6):931-960.
22. Ruhm CJ. *Parental Employment and Child Cognitive Development*. Cambridge MA: National Bureau of Economic Research; 2000. Working Paper 7666.
23. Lindberg LD. Women's decisions about breastfeeding and maternal employment. *Journal of Marriage and the Family* 1996;58(1):239-251.
24. Baydar N, Brooks-Gunn J. Effects of maternal employment and child-care arrangements on preschoolers' cognitive and behavioral outcomes: Evidence from the children of the National Longitudinal Survey of Youth. *Developmental Psychology* 1991;27(6):932-945.
25. Belsky J, Eggebeen D. Early and extensive maternal employment and young children's socioemotional development: Children of the National Longitudinal Survey of Youth. *Journal of Marriage and the Family* 1991;53(4):1083-1098.
26. Desai S, Chase-Lansdale PL, Michael RT. Mother or market? Effects of maternal employment on the intellectual ability of 4-year old children. *Demography* 1989;26(4):545-561.
27. Greenstein TN. Are the "most advantaged" children truly disadvantaged by early maternal employment? Effects on child cognitive outcomes. *Journal of Family Issues* 1995;16(2):149-169.
28. Han WJ, Waldfogel J, Brooks-Gunn J. The effects of early maternal employment on later cognitive and behavioral outcomes. *Journal of Marriage and the Family* 2001;63(2):336-354.

29. Parcel TL, Menaghan EG. Early parental work, family social capital, and early childhood outcomes. *American Journal of Sociology* 1994;99(4):972-1009.

30. Vandell DL, Ramanan J. Effects of early and recent maternal employment on children from low-income families. *Child Development* 1992;63(4):938-949.

Maternity, Paternity, and Parental Leave Policies: The Potential Impacts on Children and Their Families

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Introduction and Subject Relevance

Over a century ago, maternity policies were enacted to protect the physical health of working women and their babies at the time of childbirth. With the dramatic rise in female labour force participation rates since the 1960s (especially among married women with young children), these policies have become increasingly important. More recently, child rearing, paternity, and parental leaves were developed in response to the needs of working women (and parents), but also out of concern for child well-being. A European Union (EU) directive mandating a paid 14-week maternity leave was adopted as a health and safety measure in 1992 and a directive mandating a three-month parental leave was enacted in 1998.[1-3]

Job-protected leaves following childbirth (and, more recently, adoption) have become the policy norm in almost all industrialized countries, and are paid for through statutory sickness (temporary disability) benefits, unemployment insurance benefits, family allowance systems, employment benefits, or as a separate social insurance benefit. The major trends in the 1980s and 1990s have been to establish parental leaves as supplements to existing maternity leaves, to extend leave policies with a view to creating real alternatives to out-of-home infant care, and to make policies stronger instruments of gender equity.

The original drive towards a post-childbirth leave policy was not motivated by concern for the needs of children but rather by the needs of mothers. The drive towards a parental leave policy, however, was motivated by both concern for child well-being and interest in supporting gender equity.

Cross-nationally, leave policies vary in their eligibility criteria, duration, benefit levels, and take-up. Europe is creating a new standard, with parental leaves becoming the norm and, increasingly,

parents can choose to substitute a paid and job-protected leave for out-of-home care. Among the advanced industrialized countries, Canada's one-year leave ranks among the most generous policies in its duration, but among the least generous in its benefit levels. Nonetheless, leave provided in Canada still outstrips that in the United States, where only brief, unpaid leaves are the norm.[1-4]

Cross-nationally, the critical policy differences have to do with the extent to which a policy is designed:

1. To support family work and child rearing and to create an incentive for women to leave the labour force when children are very young; or
2. To facilitate women's work outside the home and help reconcile work and family life by protecting and promoting the well-being of children while their parent(s) are in the labour force; or
3. To allow women and parents to choose between the above options to suit their own preferences.

Problems and Research Context

Thus far, research in this field has focused largely on the consequences of leave for women (e.g., maternal employment; mother's wages over time), and, to a lesser extent, for employers. The literature suggests that there have been no negative consequences of the policies for women or for employers where short and intermediate term leaves are concerned; but there may be negative consequences for women who take extended leaves (e.g., three years), particularly if they take multiple, sequential leaves.[1,5]

Leaves have a positive effect in that they stimulate higher rates of female labour force participation. As more women are employed, more pay income tax and government revenues rise. Other benefits, harder to quantify or monetize, are the positive consequences for workers trying to reconcile work and family life.[1,2,5]

Recent Research

While research into the consequences of leave on children is comparatively limited, the positive consequences of leave on the health of mothers and children have been documented in several countries. Increasingly, child well-being is being discussed as an important component of policy

and warrants further attention by researchers. A study by Ruhm found that paid parental leave policies improved child health as measured by birthweight and infant or child mortality. He found that “Parental leave has favourable and possibly cost-effective impacts on pediatric health.” (p.23)[6] The most likely reason, according to Ruhm, is that leaves provide parents with additional time to invest in taking care of their young children. More generous leave policies appeared to reduce infant and young child mortality. “In particular there is a much stronger negative relationship between leave durations and post-neonatal mortality of fatalities between the first and fifth birthday than for perinatal mortality, neonatal deaths, or the incidence of low birthweight. The evidence further suggests that parental leave may be a cost-effective method of bettering child health.”[6] Moreover, the availability of these policies reduces the need for out-of-home infant and toddler care, since the demand for such services is linked to the duration (and benefit adequacy) of the leave policy.

In a study of 18 OECD (Organization for Economic Cooperation and Development) advanced industrialized countries, Sakiko Tanaka assessed the outcomes of parental leave policies on child health outcomes.[7] Covering more than three decades (1969-2000), her study confirms and updates Ruhm’s earlier work described above. The outcomes she studied are infant mortality, low birth weight, and immunizations. Her major finding is that longer periods of paid leave are associated with reductions in infant mortality while unpaid and/or non-job-protected leaves have no significant effect.

In their study of outcomes for children in the U.S., Berger, Hill, and Waldfogel compared children whose mothers were still at home at twelve weeks after childbirth (the maximum leave permitted under the U.S. Family and Medical Leave Act) with those whose mothers returned to work earlier.[8-9] They found that children whose mothers returned to work in less than twelve weeks fared worse on a number of health and development outcomes. They were less likely to have had regular medical check-ups, less likely to be breast fed, less likely to have had all their immunizations by age 18 months, and if their mothers worked full-time, were more likely to have behaviour problems at age four.

Implications

The key policy issues around leave policy are three-fold: eligibility criteria for qualifying for a leave, duration of leave, and level of benefits. Policies covering about one year of fully job-protected leave and targeting parents with strong prior labour force attachment with benefits

covering close to full wage replacement, and with a guaranteed place for a child from the age of one, in a good quality, affordable, out-of-home care facility appear to be garnering support. It is now recognized that both *parental choice* and support for child well-being are enhanced by this kind of approach.[1]

Conclusions

Parental leaves are a modest budget expenditure, but should constitute an essential part of any country's child and family policy and an essential component of a country's early childhood education and care policy. It is up to researchers to monitor the impacts of leave policy on children and child development as, clearly, no industrialized country today should be without such a provision.

References

1. Kamerman SB. Parental leave policies: An essential ingredient in early childhood education and care policies. Society for Research in Child Development. *Social Policy Report* 2000;14(2):3-15.
2. Kamerman SB. From maternity to parental leave policies; women's health, employment, and child and family well-being. *Journal of American Women's Medical Association* 2000;55(2):96-99.
3. Moss P, Deven F, eds. *Parental leave policies: Progress or pitfall?* The Hague, Brussels: NIDI/GBGS Publications; 1999.
4. OECD. *Starting strong: Early childhood education and care*. Paris, France: OECD; 2001.
5. Ruhm CJ. The economic consequences of parental leave mandates: Lessons from Europe. *Quarterly Journal of Economic* 1998;113(1):285-317.
6. Ruhm CJ. *Parental leave and child health*. Cambridge, Mass: National Bureau of Economic Research; 1998. Working paper W6554.
7. Tanaka S. Parental leave and child health across OECD countries. *Economic Journa*l 2005;115(501): F7-F28.
8. Waldfogel J. Public policy and child outcomes: New evidence on parental leave and child health; May 12-13, 2005; Processed.
9. Berger L, Hill J, Waldfogel J. Maternity leave, early maternal employment and child health and development in the US. *Economic Journal* 2005;115(501): F29-F47.

Parental Leave Policy: Comments on Lero, Kamerman and Ruhm

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Introduction

Lero, Kamerman and Ruhm's commentaries in the area of parental leave policy have been extensively published. But, as Lero has suggested in her review, "There are still relatively few studies that address these concerns, and results are neither consistent nor generalizable outside of the United States, where maternity/parental leave, health care, and child care policies are atypical of the rest of the world's industrialized nations." As early as 1991,[1] over a hundred countries, including virtually all of the industrialized nations, had parental leave policies. According to Kamerman, Canada has one of the most generous policies, with one year of paid leave. By contrast, the European Union has mandated a shorter 14-week paid maternity leave. The United States provides a brief leave, which is unpaid. Surprisingly, research on leave policy has been conducted primarily in the United States, a fact which may lead authors such as Kamerman to mitigate their commentaries, referring to the "potential" impact of leave policies. Therefore, we must bear in mind that these authors were presented with a very limited set of mixed data for review.

Research and Conclusions

Kamerman discusses Ruhm's study,[2] which suggests that parental policies improve child health (so far as birthweight and infant or child mortality are concerned) and that paid leave reduces the need for out-of-home infant and toddler care. She goes on to note that there may be "negative consequences for women who take extended leaves (e.g., three years), particularly if they take multiple, sequential leaves." Ruhm's study was based on European data, with expected positive results.

Ruhm's review exposes the negative effects of early paid maternal employment as shown in many American studies. The studies reviewed invariably demonstrate that not only did maternal employment during a child's first year produce negative outcomes, but in some cases it offset any

benefits gained during maternal employment during the second and third year of a child's life. The papers reviewed by Ruhm that support this contention are, as yet, unpublished.[3-5] Many other studies that have explored the effects of a mother's absence on social and emotional relationships (such as the Belsky[6] studies, cited in Ruhm's commentary) have been largely refuted by an extensive NICHD study.[7] The NICHD study demonstrated that children who received early child care showed normal emotional and cognitive development. Therefore, Ruhm's statement that "maternal employment during a child's first year appeared to negatively affect subsequent cognitive test scores and was associated with increases in behavioural problems" has been disproved. Further, Ruhm posits that a decrease in the frequency and duration of breastfeeding may mediate the negative effects associated with working during a child's first year of life. However, his theory (based on dated references from 1989 to 1994)[8-10] overlooks the growth of the breast pump industry and the growing incidence of breastfeeding amongst working women. This tendency suggests that infants are not being deprived of their mother's milk.

Lero's commentary stresses the highly individual nature of the effects of maternal employment and maternal leave on children. Citing the Wisconsin Maternity Leave and Health Study, which showed no differences between homemakers, part-time, and full-time employed women in measures of mental health that included depression, anxiety, self-esteem and the length of leave, she holds that the length of leave taken is not, in itself, a significant contributor to maternal mental health. In fact, as Lero points out, several investigators have reported that depression was greatest among mothers who wished to return to work but took longer leaves than they would have preferred or who chose to remain at home for other reasons.[11-13] Therefore, Lero notes, it would appear that a mothers' satisfaction with her role and spousal and social support for that role may be preponderant considerations in mother–infant interactions and may constitute mediating factors in maternal employment and child development outcomes.

Lero's commentary highlights the importance of conducting research on leave where options are available and optimal, such as in Canada or in European countries. Moreover, the only truly valid comparisons to be made are between mothers who elect to stay home for lengthy paid leaves and mothers who prefer to return to work and place their children in quality, affordable childcare services. For, at the very least, maternity leave research must be interpreted and discussed in the context of best-case alternatives, including research on high-quality, affordable childcare services.

Implications for Development and Policy

The commentaries from Lero, Kamerman, and Ruhm offer laudable implications for maternal leave policies. Kamerman suggests that the concept of a year of paid leave that comes close to a full wage replacement and a guaranteed place for a child in quality, affordable care appears to be gaining acceptance. But in reality, with exception of France and Sweden, mothers have not been offered optimal alternatives. Ruhm contends that the first year of life is sufficiently important to justify the comparatively lengthy paid leave policies available in Europe but not yet available in the US. He goes on to suggest that child development has been addressed as a passing concern and that science has been largely "ignorant about the tradeoffs that the various policies may entail." “Trade-off” is a key term in the United States as leading authorities on child development often support maternal leave *at the expense of* providing more optimal childcare. For her part, Lero points out that more research is needed on supports in the workplace, such as greater scheduling flexibility, breastfeeding accessibility, and high-quality daycare facilities.

I would concur with the recommendations made by these authors and would also recommend that employers provide an equal-opportunity voucher-like system wherein employees would be offered leave-taking credits in the form of maternity leave, child care, wellness centre participation, elderly care leave, or additional medical benefits. Employers in the US are inconsistent in their leave practices, providing leave benefits to some employees and not others. In the cafeteria-style system I am proposing, employees could elect to use their voucher benefits for a return to school, additional training, or a leave with the approximate benefits of maternity leave. Since the basic communication skills of infants develop within the first 3–5 months of life and given the new data supporting quality care for infant development, a similar duration of leave for long-term employees appears reasonable. At the very least, tax-free savings instruments should be made available to people who wish to invest in childcare, and such programs should be a pre-tax. Federal funds could be profitably spent on studying countries where both maternity leave and childcare alternatives are available so that the various benefits of home and childcare environments may be assessed to the advantage of parents and children alike.

References

1. Kamerman SB. Child Care Policies and Programs: An International Overview.*Journal of Social Issues* 1991;47(2):179-196.
2. Ruhm, CJ. *Parental Leave and Child Health.* Cambridge, MA: National Bureau of Economic Research; 1998. Working Paper W6554.
3. James-Burdumy, S. *The Effect of Maternal Labor Force Participation on Child Educational Attainment*. [mimeo] Princeton, New Jersey: Mathematica Policy Research, Inc; December 1999.
4. Neidell, MJ. *Early Parental Time Investments in Children’s Human Capital Development: Effects of Time in the First Year on Cognitive and Non-cognitive Outcomes.* [mimeo] Los Angeles, CA: University of California at Los Angeles; August 2000.

5. Ruhm CJ. *Parental Employment and Child Cognitive Development*. Cambridge, MA: National Bureau of Economic Research; April 2000. Working Paper No. 7666.
6. Belsky J. The 'Effects' of Infant Day Care Reconsidered. *Early Childhood Research Quarterly* 1988;3(3):235-272.
7. Friedman S. Overview of the NICHD study of Early Child Care and the Public Release Data Set. Paper presented at: Symposium of the Society for Child Development; April 19-22, 2001; Minneapolis, Minn.
8. Desai S, Chase-Lansdale PL, Michael RT. Mother or Market? Effects of Maternal Employment on the Intellectual Ability of 4-Year Old Children. *Demography* 1989;26(4):545-561.
9. Blau FD, Grossberg AJ. Maternal Labor Supply and Children's Cognitive Development. *Review of Economics and Statistics* 1992;74(3):474-481.
10. Parcel TL, Menaghan EG. Early Parental Work, Family Social Capital, and Early Childhood Outcomes. *American Journal of Sociology* 1994;99(4):972-1009.
11. Hock E, DeMeis DK. Depression in mothers of infants: The role of maternal employment. *Developmental Psychology* 1990;26(2):285-291.
12. Klein MH, Hyde JS, Essex MJ, Clark R. Maternity leave, role quality, work involvement, and mental health one year after delivery. *Psychology of Women Quarterly* 1998;22(2):239-266.
13. McKim MK, Cramer KM, Stuart B, O'Connor DL. Infant care decisions and attachment security: The Canadian Transition to Child Care Study. *Canadian Journal of Behavioural Science- Revue canadienne des sciences du comportement* 1999;31(2):92-106.

Parental Leave: a Complex Issue. Comments on Ruhm, Lero, and Kamerman

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Introduction

The papers by Ruhm, Lero, and Kamerman focus on the effects of maternity and parental leave policies on children and their families. They outline what is currently known about this topic, suggest what research still needs to be done in this area, and offer suggestions on how policies in this area could be developed.

Research and Conclusions

All three authors reach similar conclusions in their papers:

- Parental leave is one important accommodation designed to increase the ability of families to balance the needs of the workplace and home. — Ruhm
- Parental leaves are modest policies on the budget side, an essential part of any country's child and family policy, and an essential component of a country's early childhood education and care policy. — Kamerman
- Paternity leaves and benefits are variously referred to as family policies that protect maternal and infant health, as employment policies that promote gender equity, and respect the rights of workers to combine work and family responsibilities, and as an essential ingredient in early childhood education and care policies. — Lero

For the above statements to be true, however, men and women would have to be equally likely to use these policies (otherwise we would be studying maternity leave), and no negative work-related consequences would be associated with the use of these policies (negative work-related consequences imply a lack of balance). Unfortunately, research documented in business literature indicates that neither of these assumptions is true.

Are men and women equally likely to use parental leave? While there is very little research on paternity leaves, the answer to this question seems to be a resounding “No!” Very few men seem to take paternity leaves. Rather, they take a few vacation days or other paid discretionary days (what is referred to by Peck as “informal paternity leave”) when their children are born.[1]

In addition, there is ample empirical evidence showing that women who take parental or maternity leave experience negative consequences at work. In a very recent study, Budig and England[2] report a wage penalty of approximately 7% per child among young American women.

A recent study conducted by Statistics Canada[3] indicates that motherhood is also associated with a wage gap in Canada. Using data from the 1998 *Survey of Labour and Income Dynamics*, Drolet determined that mothers who had their children later in life earned 6.0% more than mothers who had their children early. While this gap in wages was observed among mothers of all ages, the incidence was found to be greatest among younger Canadian women. Drolet also notes that the wage differentials are greater with respect to the timing of children than the timing of marriage. On one hand, mothers who delay their pregnancy obtain 17.1% higher hourly wages on average compared to those who chose to have children early. On the other hand, women who delay their marriage earn 7.8 percent more than those who marry early. Similar findings were reported by Andrew et al.[4] who found an inverse relationship between the career success for women and the number of offspring they chose to have.

Recent research supports the idea that the cohort of women now in their prime childbearing years shows a marked lack of enthusiasm for childbearing. This conclusion is based on recent research, which has noted an increased propensity on the part of many professional women to remain childless, or delay motherhood.[3-5] Data published in 2002 by Statistics Canada indicates that Canada's total fertility rate has been declining drastically over the past several decades. From 1979 to 1999, the fertility of Canadian women aged 20 to 24 declined nearly 40% while fertility among those aged 25 to 29 decreased about 25%. In 1999, the fertility rate was at a record low of 1.52 children per woman. Drolet also notes that “Current trends in marriage and fertility patterns suggest that young Canadian women are delaying family formation and concentrating on developing their careers.”[3]

Human capital theory[6] can be used to explain why motherhood is becoming less attractive to women in managerial and professional positions. According to this theory, people make investments such as acquiring education or experience, to upgrade and earn higher wages. The

greater the investment an employee has made, the greater the potential cost of dropping out of the labour force and thus, the less likely he or she will be to do so.[1] Human capital theory would predict that women with more invested in their career (i.e., more education, work experience, and greater seniority) would be less likely to have children if they felt that taking maternity leave would reduce their human capital.[7]

This phenomenon is not a new one. In a landmark study, Goldin[8] examined the relationship between career, marriage, and children by tracing the labour force participation rates of five cohorts of American female college graduates over the last century. This study concluded that combining career and family has always been a daunting task for women and that over the century a significant proportion of college-educated women have coped with conflicting career and family demands by deciding to remain childless.

A recent study conducted by Sylvia Ann Hewlett[9] has also explored this issue. Hewlett's study focused on two age cohorts of professional women; the breakthrough generation, aged between 42 and 55, and the younger generation aged between 28 and 40. According to her survey, 33% of high-achieving women (in the younger cohort defined as those earning a minimum of $55,000 a year, and in the older cohort those earning a minimum of $65,000 a year) were childless at the age of 40. Half of those in her ultra-achiever group (defined as women earning $100,000 a year) did not have children. Hewlett concluded her study by pointing out that career success was negatively correlated with the probability of having a family with children. Taken as a whole, this body of literature suggests that policy makers have to think beyond maternity and parental leave if they wish to facilitate the task faced by professional women in having children.

Research in the area of maternity/parental leave is also limited by the fact that career cycle issues for women are often treated as separate from (or not relevant to) life cycle issues (i.e., when to have children or how long to stay at home with a child). Unfortunately, these two elements are not separate. The peak years for having children coincide with the peak years for career progression and development. Hewlett provides an excellent quote from economist Lester Thurrow to illustrate this catch 22:

> *The years between 25 and 35 are the prime years for establishing a successful career. These are the years when hard work has the maximum payoff. They are also the prime years for launching a family. Women who leave the job market during those years (i.e., take maternity or parental leave) may find that they never catch up.*[10]

The effect of women's careers on their ambivalence around having children can be attributed to a shift in career expectations that has led many women to establish career patterns similar to those of their male peers.[11] The years of career development and advancement are often characterized by intense demands at work, long hours, and arduous job-related travel. These work demands are incompatible with the task of bearing and raising a child. Since having children late offers a better career path for women both in terms of salary and tenure, many appear to be delaying family formation. This delay often results in smaller families or childlessness.

Conclusions

What do we know about the impact of parental leave on child and family outcomes? Based on these articles, it would seem we do not know a great deal. The authors identify a number of problems with the research in this area that greatly limits our ability to draw meaningful conclusions regarding the effects of parental leave policies on both children and parents. Flaws noted by the authors include the lack of research on a range of important factors that may intervene between infancy and later periods of life, including household structure and the availability of high quality daycare, inconsistent findings, and relatively small effect sizes. They also noted that the mechanisms by which parental investments in childcare can yield improved outcomes are unknown at this time. Ruhm points out that it is difficult to determine how the use of parental leave affects children, since the mothers who take leave when children are young are likely different from those who do not. These limitations indicate that considerable caution should be used in applying the available research. Instead, this particular literature leaves the reader with the unfortunate impression that maternal employment has a negative impact on children.

Implications

All three authors discuss maternity and parental leave policies. However, most of the research in this area focuses on the impacts of *mothers* electing to work instead of staying home for the first few years with their young children or the impact of mothers who elect to take maternity leave. Simply calling this policy “parental” leave has not changed how it is viewed. It largely remains a policy for women. As Budig and England note:

While the benefits of mothering diffuse widely — to the employers, neighbors, friends, spouses and children of the adults who received the mothering — the costs of child rearing are borne disproportionately by mothers.[2]

There is a real need to reconcile the needs of society (i.e., population growth and child development) with the needs of female professionals (i.e., their career needs and the choice to have children). Indeed, there is a need for researchers to go beyond their examination of maternity and paternity leave, as policy changes alone will not dictate a cultural shift.

In my opinion, the current research and policy focus on *parental leave* offers a simple solution to what all three authors (but particularly Lero) note is a very complex issue. This is only one component in a set of policies and supports that need to be developed to help parents balance competing work and family demands. To address this issue in a meaningful way, we need to look at how we can reduce women's burden of costs in bearing and rearing children. Insodoing, we should not restrict our examinations to societal policies such as parental and maternity leave. Rather, we should look at how jobs are structured and how employees are rewarded (e.g., rewards are currently linked to years of experience, seniority, and the ability to work long hours). Tax policy could also be a useful area to investigate (e.g., how can we encourage fathers as well as mothers to take parental leaves?).

Other areas worthy of additional research (as identified by the authors) include the following:

- Why do women return to work early?
- Why do men not take parental leave?
- What determines how long a mother will take maternity leave?
- What determines how long a father will take paternity leave?
- How can we normalize leave-taking for both mothers and fathers?
- Why are women deciding to remain childless or have fewer children?
- What can organizations do to help working parents be effective both at home and at work? What can governments do?

Only by finding answers to these questions can we develop policies and services that support their intended beneficiaries.

References

1. Lyness KS, Judiesch MK. Are female managers quitters? The relationships of gender, promotions, and family leaves of absence to voluntary turnover. *Journal of Applied Psychology* 2001;86(6):1167-1178.
2. Budig MJ, England P. The wage penalty for motherhood. *American Sociological Review* 2001;66(2):204-225.

3. Drolet M. *Wives, mothers and wages: does timing matter?* Ottawa, Ontario: Analytical Studies, Statistics Canada; 2002.
4. Andrew C, Coderre C, Denis A. A women in management: The Canadian experience. In: Adler NJ, Izraeli DN, eds. *Competitive frontiers: Women managers in a global economy*. Cambridge, Mass: Blackwell Publishers; 1994:377-387.
5. Hajnal VJ. Can I do a good job of both family and work? Decisions regarding offspring. In: Reynold C, Young B, eds. *Women and leadership in Canadian education*. Calgary, Alberta: Detselig Enterprises Ltd; 1995:145-155.
6. Blau FD, Ferber MA, Winkler AE.*The economics of women, men, and work*. 3rd ed. Upper Saddle River, NJ: Prentice Hall; 1998.
7. Lehrer EL. The impact of children on married women's labor supply: black-white differentials revisited. *Journal of Human Resources* 1992;27(3):422-444.
8. Goldin CD. *Understanding the gender gap: an economic history of American women*. New York, NY: Oxford University Press; 1990.
9. Hewlett SA. *Creating a life: professional women and the quest for children*. New York, NY: Talk Miramax Books; 2002.
10. Thurow LC. 63 cents to the dollar: the earnings gap doesn't go away. *Working Mothers* 1984;October:42.
11. Faux M. *Childless by choice: choosing childlessness in the eighties*. Garden City, NY: Anchor Press/Doubleday; 1984.