DRC-110 72279

FERTILITY AND THE LABOUR FORCE IN CANADA: CRITICAL ISSUES

5

Carol Vlassoff September, 1986

> ARCHIU VLASSO NO.7

FERTILITY AND THE LABOUR FORCE IN CANADA: CRITICAL ISSUES

I The significance of fertility for Canada's social and economic future

The rate of fertility has fallen so low in Canada that the replacement of the present generation is no longer assured. Canadians now have fewer children, later in their lives and more may choose to forgo parenthood altogether. Changes of unprecedented proportions are taking place in the dynamics of population growth, the age structure and family and household formation. Fertility is the single most important demographic factor underlying these changes. Neither mortality nor migration, the other two components of population growth, have had a comparable influence. (Romaniuc, 1984:7)

While these dramatic changes are of considerable interest to demographers concerned with the study of fertility levels, trends and differentials, their relationship to the social and economic future of the larger Canadian society is perhaps less obvious. It is the purpose of this paper to highlight these interrelationships, focusing particularly on the links between fertility behaviour and the labour force and the critical issues these entail for future planning and policy-making in Canada.

As Romaniuc notes, fertility influences the social and economic composition of Canadian society through the mediation of three main variables: population growth, the age structure and family and household formation. The following example

illustrates the importance of fertility in determining population growth in Canada. During the baby boom of the 1950's and early 1960's, when births averaged between 3-4 children per woman the population grew at exceptionally high rates: approximately 3% per year. Conversely, recent low fertility levels of about 1.7 births per woman are reflected in Canada's current low growth rate of just over 1% per year. Levels of population growth, and fluctuations therein, largely determine the volume of demand for employment, housing, education, health and other social and economic benefits.

Canada's baby boom generation, aptly referred to by Kettle (1980)the "big generation", also illustrates as how a population's age structure influences social and economic From 1917-1947, the number of children reaching conditions. school age each year was fairly consistent, fluctuating between 235,000 and 265,000. Thereafter it began to grow steadily, size within 20 years. doubling in Schools and related educational services were rapidly expanded to accommodate the increased demand with, apparently, the implicit assumption that growth, both demographic and economic, would continue A return to lower fertility in the last two indefinitely. decades has created an abnormal "bulge" in the age structure and an attendant sharp decline in the need for schools and other educational services. Further social and economic shocks have been, and will continue to be, felt as the "big generation" passes through the various phases of its life-cycle.

Changes in the family and household formation are also affected by fertility insofar as the latter is the major determinant of family size and the age structure of the family. The number of children and the timing of child-bearing also affect the gap between generations, and hence the economic activities of the family members, particularly women.

Considerable research on Canadian fertility patterns, trends and differentials has been conducted in recent years. This has been made possible because of the availability of census information, birth records and a number of regional fertilty studies. Moreover, a Canada-wide fertility survey has recently been completed, and the data should be available for public use within the next year. In spite of this solid knowledge base in the area of fertility research, many important issues have received scant attention in this country. Among these are the effects of fertility and population growth on labour force characteristics.

In Section II (a) of this paper the relationships between fertility and the labour force are discussed in some detail, focusing mainly on fertility as an independent determinant of labour force variables through its effects on population growth and age structure. A detailed discussion of the relationships between fertility and family and household formation per se would take us beyond the scope of this paper. However, where labour force issues are affected by family and household formation

behaviour, as in the content of the following sections, these interrelationships are highlighted. Section II (b) discusses another important aspect of the fertility - labour force link, namely, the relationship between child-bearing on female labour force participation. Section III (a) discusses the future Canadian fertility outlook, based upon what is indicated by recent research. Finally, Section III (b) discusses the policy implications of future fertility patterns, including their impact upon employment opportunities and labour market conditions. of what is said in Section III is tentative, based speculation concerning future Canadian fertility patterns. However, the analysis should at least demonstrate the need for greater consideration, in both public and private spheres, of the potential consequences of alternative family size choices of present and future generations.

II (a) Fertility and the labour force

Changes in population are among the principal factors which determine and alter employment opportunities. Changes in a population's size and composition cause changes in the amount and types of goods and services demanded which, in turn, alter the size and characteristics of the labour force, including the amount of competition for jobs in an occupation.

The <u>level of fertility</u> is an important determinant of the size of the future labour force or the <u>labour supply</u>. This

relationship is so obvious that it needs little elaboration but can be seen easily by the heavy competition for jobs in the 1970's and 1980's resulting from the large number of people born during the 1950's and early 1960's.

Canada's population growth which, as already noted, is largely determined by fertility, is intricately connected with growth in the labour force, and hence with economic growth. basic relationship between labour force and population is the labour force participation rate which is defined as the ratio of the labour force to the source population for any age-sex group. Canada's population growth has historically closely matched the growth in the labour force, as has been demonstrated by Foot (1982).Foot also shows that, over the 1966-1979 period, population growth accounted for 3/4 of labour force growth. Increases in labour force participation, especially of women, were substantial, yet they accounted for only 1/4 of total growth. Hence, fertility, as the major determinant of population growth, continues to be a critical factor in the growth, as well as the size, of the Canadian labour force.

Changes in fertility also affect the <u>age structure of the</u> population, the age structure of the labour force and hence, <u>labour mobility</u>. To continue the example of the big generation, just as its entry into the labour force was plagued by fierce

competition for entry level jobs, so will be its opportunities for career advancement as it struggles to contend with the reduced number of jobs left vacant by the smaller cohorts preceding it. Solutions may be sought through part-time work, job-sharing and reduced work weeks, all of which can be encountered in Canada today. Such strains should be considerably eased for the smaller cohort of post baby boom workers presently entering the labour market.

Imbalances in the age structure of the labour force also affect the https://doi.org/10.10 affect the https://doi.org/10.10 affect the https://doi.org/10.10 and organizations to attract employees of specified ages. The armed forces, government bureaucracies, insurance companies and banks, for example, seek primarily youthful recruits. The retail trade, where a third of employees are under age 25, is likely to experience difficulties in recruiting sufficient staff as the proportion of the population of young ages declines. (Kettle, 1980: 161) Since it would be costly to replace young employees with older ones, other means such as automation will likely be sought by such sectors.

Age dominates, to a considerable, extent, the kinds of goods and services people require, and hence the kinds of industries and services which are developed in response to these needs. In other words, the age structure of the population influences the kinds and quantities of goods and services demanded. A large proportion of young people, for instance, will lead to the

development of industries geared towards youthful needs and tastes. The rapid expansion of the music and games industries in Canada over the past few years is a function of the large market of teenagers and young adults. Similarly, as the big generation ages, its sheer size likely will continue to motivate marketing people to produce appropriate products and services specifically tailored to its needs. More important, however, will be the pressure on public services, especially for health care and pensions.

The age structure of the population also determines the proportion of people which will, at any given time, be supported by the labour force, or the dependency ratio. In technical terms, the dependency ratio is the ratio of the combined child and aged population (the "non-productive" or "dependent" population) to the intermediate working age population (the "productive" or "non-dependent" group). In Canada the working age population is generally considered as those aged 15-64. already noted, the proportion of elderly in Canada's population (aged 65+) has been increasing (from 5.0% at the turn of the century to 8.1% in 1971 and 10.0% in 1983), and is expected to continue to increase, especially if fertility remains close to levels. Thus, the composition of the dependent population is changing dramatically, from the young to the elderly, and different kinds of demands are likely to be made on the working age population as a result. For example, programs for the elderly comprise a relatively larger share of Canadian

government expenditures than those for younger citizens: in 1976, per person total government expenditures for those aged 65+ were $2\frac{1}{2}$ times greater than for those in the 0-17 age group. (Foot, 1982:135) Population aging thus has important policy implications. It seems inevitable, for instance, that, as the population continues to age, there will be a substantially increased tax burden on the working age population.

II (b) Fertility and female labour force participation

The causal relationship between fertility and female labour force participation is somewhat ambiguous. Does child-bearing affect women's participation in the work force or vice versa? Several studies have shown that a woman's fertility constrains her labour force participation. (Bowen and Finegan, 1969; Sweet, 1972) On the other hand, female labour force participation has also been found to be associated with lower fertility. (Bumpass and Westoff, 1970; Whelpton et al., 1966) Canadian research on these interrelationships is limited, but it does provide some interesting insights and questions for further investigation.

In recent years there has been a marked increase in the number of women, both married and unmarried, in the Canadian labour force. At present, over 50% of all Canadian women aged 15-44 are in the work force. The dramatic rise in female labour force activity has been attributed to a number of factors: the increased availability of effective contraceptive methods, the

growth in service sector jobs, increasing divorce, expansion of child-care facilities, changes in women's status and educational attainments and the availability of labour-saving devices in the home. (Robertson and Roy, 1982) The baby boom also played an important role insofar as the swelling number of young adults in the past two decades led to a real decline in the wages and living standards of youth. Consequently, women entered the work force in greater strength, postponing child-bearing, in order to maintain family income at acceptable levels. (Robertson and Roy, 1982; Grindstaff, 1985)

How has fertility affected this trend? There is some evidence that in Canada, like the U.S. studies mentioned above, fertility is negatively related to women's labour Using data from Statistics Canada, Grindstaff participation. (1985:107) found that over 80% of childless ever-married women aged 20-40 were in the labour force compared to about 50% of those with children, and childless married women contributed about double the amount to family income as women with two or more children. "Clearly, children negatively impact both on the labour force participation of women and on the level of economic contribution provided by women to their families..." (Ibid.:108) Kyriazis and Henripin (1982) found that fetility had a strong negative effect on the number of years employed among Quebec women, although the employment measures used were rather imprecise.

The timing of fertility also has important implications for labour force participation. Grindstaff (1984), for example, has documented a greater tendency for Canadian women to begin child-bearing after the age of 30 than was previously the case, and attributes this, among other things, to the importance to women of "a period of personal growth without children." (Ibid.:103) Child-bearing also creates interruptions in women's employment which relates closely to income and status differences between men and women. (Breton, 1984; Goyder, 1981)

While fertility still appears to inhibit labour force participation in Canada, contrary evidence is beginning to For example, the labour force participation rate for women with children under three years old rose from 31% in 1975 to 52% in 1984. (Statistics Canada, 1986) Ciuriak and Sims (1980) have also documented the increase in participation rates among married women over the last five decades. However, it has also been repeatedly demonstrated in Canada, as elsewhere, that labour force participation has a depressing effect upon fertility (Henripin, 1972; Boyd, Eichler and Hofley, 1976; Collishaw, 1976) Booth and Duvall (1981) found qualified support for relationship among Toronto women, although not among women who perceived themselves as exceptional wives or mothers. evidence of the link between labour force participation reduced fertility has been cited in a paper by Rao and Balakrishnan (1986) on the basis of data from the Canadian Fertility Survey. Women who worked before their first birth delayed this birth more than four years longer than those who did not work, and such women also had lower overall fertility than those who gave birth earlier. Hence, it is probable that working mothers in Canada will have smaller completed family sizes than non-working mothers.

Thus there seems to be circular causal chain linking fertility to labour force participation and back to fertility. In support of this Cramer (1980) maintains that the causal direction is from fertility to labour force participation in the short run, and from the latter to the former in the long run. the early years of marriage, a woman's desired family size tends to determine her labour force status; in the longer term, however, her desire to enter and remain in the work force largely influences her family size decisions. Further research in the Canadian setting is, however, required before any definitive conclusions can be drawn concerning these important interrelation-ships.

III(a) Canada's fertility outlook

The annual rate of population growth in Canada has declined steadily from 3% in 1957 to 1% in the 1980's. Statistics Canada (1986) estimates that, if these trends continue, Canada's population size will begin to decrease in the 21st century,

peaking at just over 28 million by the year 2011.* Many factors lend support to the contention that Canadian fertility rates will remain low and below the replacement level of 2.1 births per woman, at least into the 1990's. These include the following:

- (1) Empirical evidence from demographic data indicate a probable continuation of low fertility levels. Grindstaff's (1975, 1985) research on fertility and childlessness, for example, documents pronounced increases in childlessness from 1971-1981. For example, in 1981, 30% of ever-married women aged 25-29 were childless, an increase of 45% from 1971. Adolescent fertility was also found to have declined dramatically over the 1971-1981 decade.
- (2) The shift towards later ages at first birth among Canadian women has already been mentioned. Whereas cohorts in the 1960's had their first child at 23.5 years on average, women in 1980 were waiting until the of age 25. (Romaniuc, 1984:27) Moreover, there is evidence that intervals between births are also increasing. (Ibid.) Both these trends are associated with lower fertility.

^{*}Based on a fertility rate of 1.4 births per woman over her lifetime.

Changes in marriage patterns are also likely to have a (3) depressing effect on fertility. Marriage rates, especially among women below the age of 30, have declined considerably in recent years. Romaniuc reports a drop in the proportion married from 59% to 48% over the 1961-1981 period for women aged 20-24, and from 84% to 77% for those 25-29 years old. Moreover, there is a much higher incidence of marital dissolution: the 1984 divorce rate was six times that of (Romaniuc, 1984:59; Balakrishnan et al. (1985:1) A recent Statistics Canada report indicated that divorces had dropped by nearly 5% in 1985, but this may have been due to postponement by some couples in order to avail themselves of the new law which reduces the period of separation required for divorce from three years to one year. Citizen:1986) Thus, the 1986 statistics should provide a more complete picture of the effect of this reform. parent families constituted 11% of all Canadian families in 1981, 58% of which were the result of marriage breakdown. Remarriage has also increased, as have consensual or common law unions. While the effect of such marital instability on fertility has not been fully demonstrated in Canada, American research has shown that it accounted for 16% of the decline in the total fertility rate from 1961-1975. (Gibson, 1976)

- increased availability and adoption of effective (4)contraception also makes it easier for couples to have exactly the number of children they desire, thus eliminating a considerable amount of "excess ferility". For example, the Canadian Fertility Survey of 1984 found that 73% of currently married women were practicing family planning, 13% were pregnant or in the postpartum period or trying to become pregnant, 9% were sterile and only 5% were not using any method. Effective methods predominated, especially the pill and sterilization. Moreover, women are adopting sterilization at ever earlier ages. (Balakrishnan et.al., 1985) The relative permanency of this method, and the inconvenience and uncertainty of reversals, make child-bearing by such women a relatively infrequent event.
- Female labour force participation in Canada, as already (5) noted, has been increasing over the past three decades. This, as we have seen, is associated with lower fertility. This is not to say that women who work will not have children; as already mentioned, mothers are an important part of today's labour force in Canada. It seems to be true, however, that labour force participation puts a brake on the number of children a woman has, and hence her total fertility will be lower than that of her non-working contemporaries. While the costs of having children can be reduced by more generous government policies, some of which will be discussed in the following section, women will still required to interrupt their careers for substantial

periods of time with the birth of each child, and these interruptions are likely to assume growing importance as women ascend the professional ladder to increasingly demanding positions.

- (6) Related to the above are the opportunity costs child-bearing and child-rearing in a society replete with alternative goods and services. Grindstaff emphasizes these alternatives in discussing why many couples delay having children for several years after marriage. "... by having a baby later in life, couples get to have it both ways career, travel and education early on in their relationship and then a child later." (Grindstaff, 1984:103) more women are opting for roles beyond exclusive motherhood and, at least for the present, smaller families make this easiest.
- economic conditions be (7) Finally, to partially seem responsible for women's greater work participation and their lower fertility patterns. This has been mentioned by several researchers (Kettle, 1980; Grindstaff, 1985) but it is most conclusively demonstrated by Robertson and (1982) in their analysis of the relative income hypothesis. Relative income, or the ability of young adults to live in the style to which they had been accustomed prior to marriage, i.e. their income earning capacity relative to that of their parents, has declined as a result of the entry of the baby boom generation into the labour market.

result, the labour force participation of young people has increased. In circumstances of relative economic hardship, lower fertility is a more probable strategy than the contrary.

In spite of these arguments for continuing low fertility patterns in Canada, the possibility of fluctuations must also be considered. Easterlin (1961: 1968; 1978) has argued for the existence and persistence of natural cycles in fertility with women from large cohorts producing fewer children than women born in small cohorts. The low fertility patterns of Canada's "big generation" seem to substantiate this thesis. The substantial drop in the birth rate during the 1960's will result in a smaller youthful population entering the labour force, competition will be less than that experienced by the preceding generation, and economic circumstances should be relatively improved. This could produce lower labour force participation rates, as the need for youth to work to maintain living standards at the level to which they are accustomed will be reduced. According to this scenario, fertility could also increase among the "baby bust" generation, as fewer women are compelled to enter the labour force to make ends meet.

On the other hand, unless present policies change dramatically, the aging population will at the same time place heavy demands upon this generation for its support, an important consideration mitigating against the high fertility - low labour

force participation hypothesis. Moreover, even if fertility does increase somewhat among the offspring of the big generation, the chances of it becoming very different from present trends seem In a recent analysis of cohort fertility in Canada, distant. Needleman (1986) makes the important observation that the baby boom came about not as a result of a shift in taste for large families but rather because of the increase in the number of families having one, two and three children. The baby boom occurred, therefore, because a larger percentage of the population had some children, rather than because of any increase in overall family size. The analogy for members of the baby bust generation would likely be an increase in those having one or two children, as opposed to none or one, with the result that overall population growth would continue to be low.

III (b) Policy implications of future fertility in Canada

For the most part, Canadians have not seemed particularly concerned about the possible implications of current and continuing low fertility levels. The exception is the province of Quebec which has recently published an analysis of the social, economic and demographic consequences of current provincial fertility trends. Much more pronounced, however, has been the concern of many Eastern European countries where explicit policies have been adopted to stimulate couples to produce more children. In France, too, the decline in fertility has elicited government concern and a study has been undertaken to investigate

various methods of arresting this decline. (Romaniuc, 1984) It is therefore timely that the Canadian government has recently demonstrated concern about Canada's demographic future and its relationship to economic and social development.

One of the important questions to be investigated concerns advantages and disadvantages of a stationary or slowly declining Canadian population. Some maintain that Canada's economic prospects would suffer from shrinking domestic markets and a smaller labour force. Others emphasize the advantages, such as the social and environmental benefits of less crowding, the potential for increased automation and productivity and the challenges of maintaining a healthy national economy. However, with the coming of the 1990's many of the problems outlined earlier, including fewer young people entering the labour force and forming new households, the problems of an aging population, and the declining demand for housing and related industries, are likely to lead Canadian policy-makers to seek ways of rebuilding the nation's eroding demographic base. While Canadians have a ready instrument for increasing population through raising immigration levels, the costs and benefits of large-scale increases, in economic, social and demographic terms, need to be carefully weighed.

What incentives could be employed to motivate Canadians to have more children? Even assuming that immigration levels are increased as a matter of deliberate policy the Government may

also favour encouraging Canadians to have larger families. Policies which could perhaps stimulate this outcome include better arrangements for child-care, extended maternity leave, more generous family allowances, renumeration for housewives, and more flexible working arrangements including opportunities for part-time employment.

A survey conducted in Quebec in 1976 questioned women concerning their perceptions of such policies. The respondents favoured measures which would allow women to reconcile their dual aspirations of career and motherhood by economic reforms such as those mentioned above. Their concerns reflected "not so much the outgrowth of a pro-natalist leaning, but rather ... concern for social equity, and the recognition that childbearing is an important social function that should be rewarded." (Romaniuc, 1984:109) Thus, it seems clear that any policies which seek to induce Canadian women to higher fertility will have to take their dual role of mother and worker into account. Assisting and reinforcing female labour force opportunities may be the most effective means of securing positive attitudes towards family formation.

In his important work on the opportunity costs of marriage and childbearing, Breton is not content to see motherhood compensated for in the ways suggested above. Even with the addition of such measures, he argues men will continue to enjoy economic superiority because of women's birthing, nurturing and

rearing responsibilities. Only if farsighted policies are introduced to allow men and women to share these responsibilities can greater equality in the work force be attained. Such policies would include paternity leave and part-time jobs for men and women so that both can enter the labour force on a part-time basis and devote more time to child-care. Parenting in lieu of mothering would be the observed pattern, on average." (Breton, 1984:23)

Finally, policies will be required to cushion the shock of the aging of the "big generation", alluded to earlier. The severity of the tax burden on the working population in the early part of the next century will depend on a variety of factors, including labour foce participation, unemployment, productivity performance, economies of scale in the provision of services to the elderly and the ease with which resources can be transferred from programs designed for the young to those tailored for the aged. (Foot, 1982) A continuing increase in female labour force participation could be an important element in the welfare of Canada's future elderly: if it continue to increase, a larger working age population will be available to support the aging generations.

The nature and variety of the demographic issues highlighted in this paper illustrate the significance of fertility in determining Canada's demographic, social and economic future. The search for creative policies to most effectively address the challenges imposed by this complex web of interrelationships remains a major task for future research.

BIBLIOGRAPHY

- Balakrishnan, T.R., Karol Krotki and Evelyne Lapierre-Adamcyk (1985) "Contraceptive use in Canada." Family Planning Perspectives. 17(5): 209-215.
- Balakrishnan, T.R. et al. (1985) "A hazards model analysis of marriage dissolution in Canada." Presented to the Population Association of America annual meeting, San Francisco, April 3-5.
- Booth, Alan and Donna Duvall (1981) "Sex roles and the link between fertility and employment." Sex Roles 79(8):847-856
- Bowen, W.G. and T.A. Finnegan (1969) The Economics of Labour Force Participation. Princeton: Princeton University Press.
- Boyd, M., M. Eichler and J. Hofley (1976) "Family functions, formation and fertility." Pp. 13-52 <u>In</u> G. Cook (ed.) Opportunity for Choice. A Goal for Women in Canada. Ottawa: Statistics Canada and Inst. C.D. Howe.
- Breton, Albert (1984) Marriage, Population, and the Labour Participation of Women. Ottawa: Supply and Services Canada.
- Bumpass, L. and C.F. Westoff (1970) <u>The Later Years of Childbearing</u>. Princeton: Princeton University Press.
- Citizen, The (1986) "Divorce is down 4.9% in 1985." (C.P. Story) p.A20, September 13.
- Ciuriak, Dan and Harvey Sims (1980) Participation Rate and Labour Force Growth in Canada. Ottawa: Department of Finance.
- Collishaw, N. (1976) Fertility in Canada, 1971. 5(1) Ottawa: Statistics Canada.
- Cramer, J.C. (1980) "Fertility and female employment: problems of causal direction." American Journal of Sociology 45(2): 167-190.
- Easterlin, R.A. (1961) "The American baby boom in historical perspective." American Economic Review 51:869-911.
- Easterlin, R.A. (1968) "Population, labour force and long swings in economic growth." The American Experience, Ch. 5. New York: Columbia University Press.

- Easterlin, R.A. (1978) "What will 1984 be like? Socioeconomic implications of recent twists in age structure." Demography 15:397-432.
- Foot, D. (1982) <u>Canada's Population Outlook: Demographic Futures</u> and <u>Economic Challenges</u>. <u>Toronto: The Canadian Institute</u> for <u>Economic Policy Series</u>.
- Gibson, C. (1976) "The U.S. fertility decline, 1961-1975, the contribution of changes in marital status and marital fertility." Family Planning Perspectives 8(5).
- Goyder, J. (1981) "Income differences between the sexes: findings from a national Canadian survey." Canadian Review of Sociology and Anthropology 18:321-328.
- Grindstaff, Carl F. (1975) "The baby bust: changes in fertility patterns in Canada." Canadian Studies in Population 2:15-22.
- Grindstaff, Carl F. (1984) "Catching up: the fertility of women over 30 years of age, Canada in the 1970s and early 1980s." Canadian Studies in Population 11(2):95-109.
- Grindstaff, Carl F. (1985) "The baby bust revisited: Canada's continuing pattern of low fertility." Research Note. Canadian Studies in Population 12(1):103-110.
- Henripin, J. (1972) <u>Trends and factors of Fertility in Canada</u>. Ottawa: Statistics Canada.
- Kettle, John (1980) The Big Generation. Toronto: McClelland and Stewart.
- Kyriasis, Natalie and J. Henripin (1982) "Women's employment and fertility in Quebec." Population Studies 36(3):431-440.
- Needleman, Lionel (1986) "Canadian fertility trends in perspective." Journal of Biosocial Science 18:43-56.
- Rao, K. Vaninadha and T.R. Balakrishnan (1986) "Age at first birth in Canada: a hazards model analysis." Presented at the Canadian Population Society annual meeting, Winnipeg, June 7-9.

- Robertson, Matthew and Arun S. Roy (1982) "Fertility, labor force participation and the relative income hypothesis. An empirical test of the Easterlin-Wachter model on the basis of Canadian experience. American Journal of Economics and Sociology 41(4):339-350.
- Romaniuc, A. (1984) Fertility in Canada: From Baby-boom to Baby-bust. Ottawa: Statistics Canada.
- Statistics Canada (1986) "Canada in the 21st Century." Canadian Social Trends. Summer.
- Sweet, J.A. (1972) "Labor force re-entry by mothers of young children." Social Sciences Research 1(1):189-210.
- Whelpton, P.K., A.A. Campbell and J.E. Patterson (1966)

 Fertility and Family Planning in the United States.

 Princeton: Princeton University Press.