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ABSTRACT

To followup an earlier study of the relative importance of age, education, and marital status as variables influencing female participation in the labor force, this research attempts to measure the relative importance of similar factors in determining whether or not a woman works or wishes to work. Particular emphasis was given to such determinants as age, child status, education of married women, residence, and education of husband. One important finding of the study was that the presence or absence of a young child remains, in the aggregate, the most important single attribute affecting a wife's participation in the labor force until the age of 44. It was concluded that the general improvement in the level of education is likely to induce more and more wives to remain in the labor force after they are married, and to return to it when their major child-raising responsibilities in the home are passed. Still other factors that are expected to influence the participation of women in labor force are the use of effective birth control methods and the general continuing rise in the husband's income. Part 1 of this study is available as ED 033 199. (Author/JS)

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SPECIAL LABOUR FORCE STUDIES

Series B, No. 2

WOMEN WHO WORK: PART 2
Married Women in the Labour Force: The Influence of Age,
Education, Child-Bearing Status and Residence

by

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and
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FOREWORD

In 1966 the Special Labour Force Studies was initiated by the Dominion Bureau of Statistics (see list on page 2). The research studies were designed to reach a broad audience interested in the changing nature and composition of the Canadian labour market. Some aspects of manpower development, however, require a somewhat more technical analytical approach. For this reason, the present series (B), of which this is the second study, will be published as a companion series of technical papers.

These studies are prepared under the direction of Dr. Sylvia Ostry, Director, Special Manpower Studies and Consultation.

The responsibility for the analysis and interpretation of the data is that of the authors and not of the Dominion Bureau of Statistics.

WALTER E. DUFFETT,
Dominion Statistician.

AUTHORS' PREFACE

This study was begun in the summer of 1967 in the Special Manpower Studies and Consultation Division of the Bureau, and completed during the winter of 1967-68. We wish to express our thanks to Dr. Sylvia Ostry and to Mr. Norman Davis for many valuable discussions, and to Norman Davis for over-seeing the computer output.

Most of the calculations presented here were produced by REGRO-4, one of the multiple regression programmes prepared in the Scientific Programming Section of the Bureau.

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INTRODUCTION

"The role of women in a community is a most important one and no nation can afford to ignore it. Harnessed and properly controlled, they present a great and powerful force which can be used for the benefit and progress of the nation. Left to run wild, however, or simply ignored, they will be as locusts in the nation's cornfields."¹

In Canada the harnessing of the nation's woman-power, in the sense of bringing increasing proportions of the female population into the labour force, has been going on for some time, and has recently gained substantial dimensions. The following trends have emerged:

- (1) the proportion of women in the labour force continues to rise: in 1967, 30.7 per cent of the labour force was comprised of women in contrast with only 23.9 per cent in 1957, and 21.9 per cent in 1947;
- (2) an increasing proportion of married women is in the labour force: in 1961 the figure was 22.5 per cent, and rose to 24.4 per cent in 1963, 27.7 per cent in 1965, and 30.5 per cent in 1967.²

Such marked changes in the pattern of female labour force behaviour lead one to ask why and what continuation might be expected in the future.

This study is an extension of an earlier probe into some of the determinants of the labour force participation of women in Canada.³ The first study was concerned with the relative importance of three variables—age, education and marital status—in influencing participation in the labour force.

The further growth in the proportion of women in the work force is likely to occur only with a rise in the labour force participation rate of married women.⁴ At the moment, married women, while more

likely than ever before to be gainfully employed, still constitute the largest pool of potential labour in the country, outside the school-age population.

The considerable rise in the participation of married women in the work force has undoubtedly had some effect on family life and marital relationships.⁵ The implications of a continued upward trend in the employment of married women are unclear. There is, however, considerable evidence that child-bearing patterns are being affected,⁶ suggesting a conflict between the roles of "mother" and "worker".

Thus far, the work force has attracted from the ranks of married women the greatest increase among women in their late thirties and forties.⁷ Given that the average woman is finished with childbearing by her mid-thirties,⁸ the impact on fertility of recruiting these "older" women into the work force will be minimal. The greatest potential effect on fertility would be achieved through a delay in childbearing among women who choose to continue working for some time after marriage.

The economic implications of a massive return-to-work movement by married women not now in the labour force must be substantial. While there will be considerable debate about the implications of the rising work force participation rate of married women, there can be no doubt that such a rise has been continuing for some time and shows no signs of decelerating. This study is an attempt to assess the relative importance of several factors thought to affect their labour force participation. By ranking the importance of various influences one is hopefully in a better position to undertake the important task of projecting future change in participation rates.

BACKGROUND TO THIS STUDY

The participation rate of married women in the labour force will be greatly affected by the complex interrelation of the demand for labour with factors affecting the numbers forthcoming on the market, in

particular with the community's values concerning the "proper" roles of married women. The complexity of issues raised in discussing the supply of and demand for female labour has been outlined by other

¹ An excerpt from an address given to women by a government leader from a developing nation, reported in Hottel, A.K. "Women Around the World: An Introductory Comment", *The Annals of the American Academy of Political and Social Science*, January, 1967, p. 1.

² Calculations based on figures published in Dominion Bureau of Statistics, *The Labour Force*, various issues.

³ Dominion Bureau of Statistics, Special Labour Force Studies, No. 5, *Women Who Work: Part I*, by Allingham, J.D., Ottawa, 1967.

⁴ Some demographic factors creating this situation are explored in, Dominion Bureau of Statistics, Special Labour Force Studies, Series B, No. 1, *The Demographic Background to Change in the Number and Composition of Female Wage Earners in Canada: 1951-1961*, by Allingham, J.D., Ottawa, 1967.

⁵ A summary of research in this area is reported in *The Employed Mother in America*, by Nye, I. and Hofman, L., Chicago, 1963.

⁶ Blake, J. "Demographic Science and Population Policy" in Sheps, M. and Ridley, J.C. (eds) *Public Health and Population Change*, Pittsburgh, 1968, pp. 62-7.

⁷ Dominion Bureau of Statistics, *The Female Worker*, by Ostry, S., One of a Series of Labour Force Studies in the 1961 Census Monograph Programme, Ottawa, 1968.

⁸ Glick, P. and Parke, R. "New Approaches in Studying the Life Cycle of the Family", *Demography*, Vol. 2, 1965, pp. 187-202. The rapid decline in age-specific fertility rates in Canada after age 35 suggests that Canadian women are behaving like American women in this respect.

researchers and will not be pursued here.⁹ Our aim is less ambitious. A series of cross tabulations were prepared from the data collected in the 1961 *Census of Canada* in order to explore variations in the participation rates of married women having different attributes.¹⁰ While recognizing the complexity of an exhaustive theory of labour force participation, we believed that data on a sufficient range of attributes could be derived from the census to illuminate major determinants of labour force participation.

The purpose of the present study is to focus on these various attributes of married women (their education, number of children, and so on) and to try to measure the relative importance of each of these factors, both separately and together, in determining whether or not a woman works or wishes to work.

MAJOR DETERMINANTS

Cross tabulations were prepared of participation rates of married women having all the possible combinations of the following five attributes: age, child status, wife's education, husband's education and residence.¹¹ The theoretical rationale behind the selection of each of these attributes for examination is outlined below.

Age

For most citizens the law sets the lower age limit both for marriage and for gainful employment, and social custom sets an upper limit. In keeping with these constraints, we examined participation rates of married women between the ages of 15 and 64 years.

Although the patterns of labour force participation within the age range 15-64 is greatly different for males and females,¹² age *per se*, i.e., the maturation of the body, is unlikely to be of major importance on either the supply side or the demand side of the labour market within the age span noted. However, social custom is such that many jobs are restricted to persons within fairly narrow age ranges.¹³

"Changes in the participation of women within the 15-64 age range may best be understood if age is considered as a dimension along which certain role changes occur to a majority of women. These role changes tend to either facil-

⁹ "The Interaction of Demand and Supply and its Effect on the Female Labour Force in the United States", by Oppenheimer, Valerie K., *Population Studies*, Vol. 21 (3), pp. 239-59, November, 1967.

¹⁰ The tabulations were prepared at the Dominion Bureau of Statistics during the winter of 1967.

¹¹ Tabulations were prepared for all "normal families" i.e. husband present.

¹² Dominion Bureau of Statistics, *The Economic Status of the Aging*, by Ostry, S. and Podoluk, J., p. 20, Ottawa, 1966.

¹³ For example, a contemporary citizen might well be shocked to see a 55-year-old airline stewardess.

Undoubtedly when a married woman considers going to work, or leaving work, there are many factors which will be unique to her. There are also, however, factors which she will have in common with other married women of her age. One of these, for example, may be residence grouping. Furthermore, the "environmental" characteristics may well dominate the weightings which most women give to the numerous factors influencing their decision. We assume that there is sufficient homogeneity in the behaviour pattern of married women that the common attributes which we note do, in fact, dominate their labour force behaviour, the novelty of each case being largely subsumed. Accordingly, we focus our analysis on several such major attributes. The attributes which we have selected we designate the **determinants** of the married woman's decision to work.

itate employment or to impede employment although none are inherently significant to participation decisions. Rather, the significance of certain roles for participation in the labour force must be seen as culturally relative, and as such, changeable."¹⁴

Thus, in order to isolate the influence of age, as socially interpreted, from obscuring factors such as childbearing, we have taken several potentially masking factors into account in our analysis.

Child Status

We define child status as having one of the following as an attribute: no children, all children under six years of age, all children aged 6-14 years, or "other" (children in both age groups or over age 14).¹⁵

Several studies have suggested that the bearing of children and their rearing constitutes a major barrier to the gainful employment of women.¹⁶

A conflict between the roles of mother and worker is of course not inevitable but largely reflects the institutional structure of our society.

"The less the cost in transferring childbearing tasks to others, or in incorporating them within the job, the greater the compatibility. Compatibility can stem from the nature of the task or from the social organization of child care".¹⁷

¹⁴ Dominion Bureau of Statistics, *Special Labour Force Studies No. 5, op. cit.*, p. 11.

¹⁵ Ideally the number of children in any category would be added, but restrictions on tabulation prevented this. The residual child status category—"other"—appears to be primarily made up of women who have both children under age 6 and in the 6-14 age group. Once again, restrictions in tabulations prevented a finer breakdown.

¹⁶ *The Female Worker, op. cit.*

¹⁷ "Female Working Roles and Fertility", by Stycos, J.M. and Weller, R.H., *Demography*, Vol. 4 (1), p. 215. 1967.

Aside from cottage industry economies, work is usually in a location other than the home, thus requiring absence from any pre-school children during working hours. Family structure has altered in such a way that few couples have relatives living with them. In order to work, most mothers of pre-school children must hire child care. Unlike a number of European countries, Canada does not have a system of low cost day-care centres for small children.¹⁸

In Canada, the conflict between the roles of mother and worker is likely to be most keenly felt when any children are of pre-school age. After the youngest child enters school, the custodial portion of a mother's role decreases considerably, freeing her for other activities. The deterrent affect on labour force participation of pre-school children has been noted in the literature.¹⁹ Our analysis suggests that the presence of pre-school age children constitutes the single most important deterrent to labour force participation.

"The far greater porportion of a woman's work occurs after she has raised her family and re-entered the labour force. Most 35-year old women have completed their families. The work life expectancy of a 35-year old woman who has completed her family and who no longer has responsibility for the care of young children is 24 years, essentially the same as for a newly married 20-year old woman."²⁰

Education of Married Women

"Women's interest in employment—and their success in obtaining it—are strongly influenced by the extent of their education and training."²¹

The direct relationship between education of women and their participation rates has been observed by many researchers.²² Such findings are to be expected for several reasons, among them the following:

- (1) the demand for labour is generally stronger for those with higher education;
- (2) remuneration for employment is likely to be higher for a more highly educated woman, thus diminishing the proportion of her income that would have to go for child care services;
- (3) the more highly educated the wife, the more likely she is to feel "unfulfilled" in the housewife role and therefore the more open she is likely to be to the blandishments of the market place.

¹⁸ "Day Care Services for Children of Working Mother", Bulletin of the Women's Bureau, Department of Labor, Ottawa, 1964.

¹⁹ *The Female Worker*, op. cit.

²⁰ *Work Life Expectancy and Training Needs of Women*, Report No. 12, U.S. Department of Labor, Manpower Administration, Washington, 1967.

²¹ *Ibid*, p. 135.

²² For example, see *The Female Worker*, op. cit.

Observation of participation rate differences by education alone will however create a false impression of the importance of education for participation. The reason is that women in the different educational categories are also differentiated by average age, education of their husbands, residence, and, even controlling for age and marriage duration, by number of children. Thus, in comparing the participation rates of married women, some with university education and others with elementary schooling or even less, one obtains various confounding effects—for example, the residence factor: university trained women are more highly urbanized—or the child-status factor: university-educated women tend to have fewer children.

In this paper the influence of education on participation is assessed **independently** of other factors for which we can control.

Residence

One might expect a higher participation rate for married women living in more highly urbanized areas because the concentration of white collar jobs varies directly with urbanization. Moreover, it is in the cities that social change is manifest. Attitudes favourable to working wives are more likely to be widespread in the cities.

"In eight years of [city?] marriage, I have never ironed a sheet, washed a shirt, darned a sock or cooked three consecutive meals"²³

In the cities, both labour market conditions and community attitudes are perhaps most favourable to the employment of married women.

Any comparison of participation rates of married women by residence alone will be misleading because, among other differences, women living in big cities are more highly educated than their less urban sisters, and have fewer children. The factor of residence is therefore assessed **independently** of other variables, which we suspect obscure the relationship.²⁴

Education of the Husband

An inverse relationship between the income of husbands and labour force participation of wives has been observed in Canada and elsewhere.²⁵ Since education is highly correlated with income for males,

²³ "The New Woman", by Fraser, S., *Star Weekly*, January 6, 1968, p. 18.

²⁴ Duration of residence in an urban area may also be quite important. The recent migrant to the city is likely to reflect the attitudes of the area from which he has come. The problem of residence duration is discussed in "Another Look at the Indianapolis Fertility Data", by Goldberg, D., *Milbank Memorial Fund Quarterly*, Vol. 38 (1), January, 1960.

²⁵ "Labour Force Participation of Married Women: A Study of Labor Supply", by Mincer, J., *Aspects of Labor Economics*, National Bureau of Economic Research, pp. 63-97, Princeton, 1962. For Canada see, *The Female Worker*, op. cit.

it is not surprising that our results show an inverse relationship between education of husbands and labour force participation of their wives. As explained below, for a variety of reasons, including limitations of data, in this study we use the education of the husband as a proxy for his income.

The inverse relationship observed with husbands' income suggests that the economic motive

for working is a strong one for women.²⁶ Such a motive may well decline with an increase in husband's income beyond a certain point. While wives of men with a higher level of education are likely to be more educated themselves, thus probably creating a most liberal climate for the wife's roles, desires for extra-familial fulfillment and freedom to realise such desires are perhaps not enough to counteract the affluence provided by the husband.

SIMULTANEOUS CONSIDERATION OF THE FACTORS CITES: THE TECHNIQUE OF MULTIPLE REGRESSION ANALYSIS

The above analysis indicates that each of the factors mentioned exerts a distinct influence on the labour force behaviour of the married woman. What we have still to learn is the relative importance of the factors: an advanced education moves a woman into the labour force; if her husband has a high income she is deterred. Which effect is stronger? Does the presence of young children exert a stronger pull keeping the wife at home than the apparent pull into the labour force exerted by residence in larger centres? Do the relative strengths of these factors vary systematically with the age of the wife?

Above we have focused attention on one or other particular characteristic. It is, however, evident that there are a large number of factors which simultaneously affect the rate at which women in each age group enter the labour force. We shall, therefore, depart from our reliance on consideration of each factor acting alone and use a second technique which is better suited to analyse the simultaneous and separate impact of each of the factors we have outlined. The technique used here is multiple regression analysis in which we subdivide each of the variables mentioned into two or more characteristics, assigning "one" values when that characteristic is present and "zero" values when it is not. As we shall see, this enables us to discover the relative importance of each of the factors discussed above; we are also able to consider the factors in combination to gain, for example, a better idea of a women's "marketability" (especially as indicated by both her residence and education characteristics) and of her probable desire to be in the labour force (notably her education and her husband's income, both current and projected).

To use multiple regression analysis in this manner we assume that each of the factors outlined above has an additive and separate impact on the rate at which married women participate in the labour force in Canada.²⁷ The form in which we have tested this hypothesis is the following:

²⁶ Financial reasons are most often given for working. See: Dept. of Labour, *Married Women Working for Pay*, Ottawa: Queen's Printer, 1958, and Nye and Hoffman, *op. cit.*, pp. 23-26.

²⁷ The assumption that there is little interaction amongst the factors is supported by preliminary analysis of variance runs. We found some interaction between residence and child status and have therefore constructed separate regression equations for each residence grouping.

$$P = b_0 + b_1 E_w + b_j E_h + b_k C + b_l R + U$$

where

P is the labour force participation rate for each group of married women;

b_0 is the average rate at which married women participate in the labour force;

E_w is the educational attainment of the wife, divided into four ($i = 4$) categories. The categories are (1) Elementary education or less; (2) One to three years of secondary school; (3) Four to five years of secondary school; (4) University, complete or incomplete;

E_h is the educational attainment of the husband, divided into four ($j = 4$) categories. The categories are the same as for the wife;

C is child status, divided into four ($k = 4$) categories: (1) No children; (2) All children aged less than six; (3) All children aged 6 to 14; (4) All other;

R is residence, divided into four ($l = 4$) categories: (1) Metropolitan; (2) Other urban; (3) Rural non-farm; (4) Rural farm;

U the unexplained portion.

and the coefficients b_1 , b_j , b_k and b_l indicate the influence that the variables E_w , E_h , C, and R respectively, have on the participation rate, P.

The data which have been used are from the 1961 *Census of Canada*. A complete tabulation of married women was taken, and the results then cross classified into a number of cells each comprising a unique combination of the above-mentioned characteristics (e.g., a cell in which the wife has one-to-three years of secondary schooling, the husband has four-to-five years, the wife of age 15-24, there are no children, and the family lives in a metropolitan area). For each of these cells the labour force participation rates are noted. The primary reasons for focussing on these particular characteristics have been discussed above. We can now proceed to analyse the information obtained from the multiple regression runs, the major results of which are reported in Tables 1 and 3.²⁸

²⁸ The regressions were produced at the Dominion Bureau of Statistics during the summer, fall and winter of 1967. The authors wish to acknowledge the extensive contributions to this part of our analysis by Mr. Norman Davis of Special Manpower Studies and Consultation Division.

ANALYSIS OF TABLE 1: THE LABOUR FORCE PARTICIPATION RATES OF MARRIED WOMEN

In order to gain an over-all view of the labour force activity of married women we proceed first with the analysis of the labour force participation rates of married women, aged 15-64. In this section we pay particular attention to the method of analysis and to the interpretation of the tables in order to facilitate subsequent discussion when women are grouped first by age and then by residence.

Interpretation of Table 1

Consider the first column in Table 1. From it we can learn the probability that an "average" married woman in Canada in 1961 was in the labour force—the probability is 24.96 per cent, the figure beside common term in the table. Suppose we were more interested in married women between the ages of, say, 15 and 24. The figure 6.71 beside the 15-24 age group tells us that a wife falling into this age group is 6.71 per cent more likely to be in the labour force than the average—that is, of every 100 such women we would expect, on the average, that 31.67 (or 24.96 plus 6.71) of them would be in the labour force. Similarly if we were primarily interested in married women, aged 15-24, who had, say, elementary education, we find the probability that such a woman would be in the labour force to be (24.96 + 6.71 - 8.03, or) 23.64 per cent.

Before proceeding to a further discussion of the importance of the various attributes on which we are focussing, let us ensure an understanding of the table by a second example. Consider the following question: what is the probability that a married woman, who has 4 to 5 years of secondary schooling, whose husband has university education, who has no children, and who lives in a rural non-farm area will be in the labour force? The answer is found by adding the (positive or negative) contribution of each of the factors mentioned to the common term. In this particular case the detailed calculation is as follows:

| | |
|--|--------------|
| Common term | 24.96 |
| Plus contribution of specified attributes: | |
| Wife's education | 1.62 |
| Husband's education | - 5.52 |
| Child status | 14.84 |
| Residence | - 1.54 |
| | 9.40 |
| Total | 34.36 |

Thus we conclude that of 100 such women we would expect, on the average, approximately thirty-four of them to be in the labour force.

TABLE 1. Analysis of the Labour Force Participation Rates of Married Women, Canada, 1961

| Variable or attribute | Age group | | | | | |
|------------------------------|-----------|--------|--------|--------|--------|--------|
| | 15-64 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 |
| Age of wife: | | | | | | |
| 15-24 | 6.71 | | | | | |
| 25-34 | 3.27 | | | | | |
| 35-44 | 2.39 | | | | | |
| 45-54 | - 0.23 | | | | | |
| 55-64 | -12.14 | | | | | |
| Education of wife: | | | | | | |
| Elementary | - 8.03 | -10.86 | - 6.95 | - 7.93 | - 9.11 | - 5.90 |
| 1-3 years secondary | - 4.86 | - 5.19 | - 3.89 | - 4.36 | - 6.22 | - 5.14 |
| 4-5 years secondary | 1.62 | 4.11 | 1.33 | 1.01 | 1.45 | 0.86 |
| University | 11.27 | 11.93 | 9.51 | 11.28 | 13.88 | 10.19 |
| Education of husband: | | | | | | |
| Elementary | 3.80 | 1.32 | 4.50 | 4.81 | 4.07 | 2.96 |
| 1-3 years secondary | 2.33 | 1.48 | 2.09 | 2.63 | 3.03 | 2.14 |
| 4-5 years secondary | - 0.61 | 0.72 | - 1.02 | - 0.36 | - 0.64 | - 1.42 |
| University | - 5.52 | - 3.53 | - 5.57 | - 7.08 | - 6.46 | - 3.68 |
| Child status: | | | | | | |
| No children | 14.84 | 16.46 | 23.01 | 13.34 | 4.89 | 0.70 |
| Children less than 6 | -15.18 | -16.46 | -13.73 | * | * | * |
| Children 6-14 | 3.49 | * | 4.94 | - 2.43 | - 2.17 | * |
| Other | - 3.15 | * | -14.22 | -10.97 | - 2.72 | - 0.70 |
| Residence: | | | | | | |
| Metropolitan | 3.68 | 8.57 | 5.21 | 4.26 | 0.83 | - 0.85 |
| Other urban | 0.64 | 2.84 | 0.68 | 0.72 | 0.05 | - 0.87 |
| Rural non-farm | - 1.54 | - 5.16 | - 2.52 | - 2.38 | 0.74 | 1.89 |
| Rural farm | - 2.79 | - 6.26 | - 3.37 | - 2.61 | - 1.62 | - 0.17 |
| Common term | 24.96 | 31.50 | 28.22 | 32.41 | 29.79 | 18.67 |
| R ² | .72 | .85 | .87 | .83 | .83 | .79 |

* Category excluded because too few observations available.

Discussion of Table 1: The Case of All Married Women

The first column of Table 1 tells us much about the impact of the determinants of labour force status as they affect the entire group of married women in Canada.

Looking first at the age variable, it is evident that the youngest group of wives is much more likely to be in the labour force than is the oldest group. It appears that the influence of age alone is steadily to reduce the rate at which wives participate in the labour force.

The wife's education also has a marked effect on her labour force participation: the better educated a woman, the more likely it is that she will be either working or looking for work. The probability that a woman in the most highly educated group (university) will be in the labour force is 19.3 percentage points greater than for a woman having only an elementary education. No doubt this observation reflects partly the tendency of a more highly educated wife to achieve greater personal "fulfillment" by playing an active role in the labour force, partly her relatively greater "marketability" resulting in large measure from her advanced education, and partly her "opportunity cost"—the amount of income foregone if she is not in the labour force.

The husband's education is, on the average, highly correlated with his income position: the more highly educated the husband, the better his income and income prospects are likely to be. In this study, therefore, the education of the husband variable has been used as a proxy for his income.²⁹ For some purposes it is more informative than his actual current income since, in the aggregate, and when combined with knowledge of his age,³⁰ it also tells us something of his income prospects. A young, well-educated man should expect his income to rise at a much faster rate than a less well educated man of the same age.³¹

Using the husband's education as a proxy for his income, Table 1 tells us that a wife is less likely to be in the labour force, the higher her hus-

²⁹ As explained above, education is used as a proxy variable for income also because of restrictions on tabulations. It would be desirable to include both the husband's current income and his education in the analysis.

³⁰ The husband's age is typically within a few years of that of his wife. For the 1961 age distribution see *1961 Census of Canada*, Bulletin 2.1-11, Table 95.

³¹ Thus a man with a high level of education will, in general, earn much less early in his career than he will later. On the other hand, a man with a lower level of education will reach his peak salary early in his career. This is not to say that he will not expect his income to rise over time with the rise in the general output of the nation. It means simply that he could not expect his income to be much greater at any point in time than that of similarly educated people just entering the labour force. See *Earnings and Education*, by J.R. Podoluk, Advance Release from Census Monograph, "Incomes of Canadians", Dominion Bureau of Statistics, Ottawa, December, 1965.

band's income. A woman whose husband is in a relatively low income position is, on the average, 9.32 per cent more likely to be in the labour force than one whose husband has a relatively high income.

Looking now at the child status variable, for all married women the absence of children is a very strong incentive to be in the labour force whereas the presence of young children (those less than six years) provides a strong deterrent to entry. This, of course, is as one would suspect. But perhaps the strength of the two forces is surprising: for all wives aged 15-64 the probability that a wife will work is 30 per cent higher if there is no child than if there is a child under six years. The presence of one or more children aged 6-14 appears not to keep a wife from the labour force. Children in this age group are typically in school during most of the working day, hence requiring less attention from the mother, and freeing her to enter the labour force. The category "other" is less than ideal from a research standpoint comprising older children as well as some combinations of children in the less than six and 6-14 age groups. One suspects that the "other" grouping is dominated by families having children in both the less than 6 and the 6-14 age groups.

The residence variable also has an impact, but it is the weakest of the factors considered here. The larger the centre in which a wife is living the more likely is she to be in the labour force. But a metropolitan wife is only about 6.5 per cent more likely to be in the labour force than her rural farm counterpart.

For all women the measure R^2 reported at the bottom of the table indicates the proportion of the total variation in the labour force behaviour of married women accounted for by the factors we have considered. The .72 tells us that the factors we have considered account for 72 per cent of the total variation. There are, as we have mentioned before, innumerable factors which are not widely shared, and which cannot therefore be taken into account, but which influence the labour force behaviour of individual married women. For example, some married women who would otherwise be in the labour force are tending to aged or otherwise incapacitated relations, retarded children, or large gardens. Perhaps it is surprising that as little as 28 per cent of the variation in the labour force behaviour of married women remains to be explained.

Let us now proceed to rather finer breakdowns of this heterogeneous group, first standardising for age (in the rest of Table 1) and then for age and residence simultaneously (in Table 3).

Analysis of the Labour Force Participation of Married Women by Age Groups

First, let us look at the remaining columns in Table 1 where the impact of each of the variables is estimated for each age group separately. By focusing on one age group at a time, and then comparing the five groups one with another, we can learn much of the effects of the various attributes considered, particularly of the extent to which they have a differential impact from one age group to another.

In this process it is essential to have some means of comparing the impacts of the various factors—some basis for the statement that one factor is more important than another. The principle which we adopt here is to calculate, for each of the factors, the discrepancy between the classification providing the strongest incentive to enter the labour force and the one providing the strongest deterrent. For example, consider the impact of the education-of-wife variable on the labour force participation of the youngest group of wives. A wife with an elementary

level of education has a "deterrent effect" of 10.86 per cent to stay out of the labour force, whereas a wife with university education has an "incentive effect" of 11.93 per cent. The difference (10.86 + 11.93) is 22.79 per cent. For each of the other factors a similar calculation is made and the factors ranked in order of their relative impact on the labour force participation rates of married women; the calculations are reported in Table 2.³² In the discussion in the text we round to the nearest decimal point.

TABLE 2. Ranking of Labour Force Participation Incentives

| Variable or attribute | Age group | | | | |
|---|-----------|-------|-------|-------|-------|
| | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 |
| Percentage gap between strongest incentive and disincentive | | | | | |
| Education of wife | 22.79 | 16.46 | 19.21 | 22.99 | 16.09 |
| Education of husband | 4.85 | 10.06 | 11.89 | 10.53 | 6.64 |
| Child status | 32.92 | 37.23 | 24.26 | 7.61 | 1.40 |
| Residence | 14.83 | 8.58 | 6.87 | 2.45 | 2.06 |
| Rank ordering of the above factors | | | | | |
| Education of wife | 2 | 2 | 2 | 1 | 1 |
| Education of husband | 4 | 3 | 3 | 2 | 2 |
| Child status | 1 | 1 | 1 | 3 | 4 |
| Residence | 3 | 4 | 4 | 4 | 3 |

Age Group 15-24

Looking first at the youngest group, we see from Table 1 that their average participation rate is relatively high (at 31.50 per cent). From Table 2 the impact of the child status variable appears greatest, with the discrepancy between no children and the presence of one or more children younger than six years at almost 33 per cent.

The variable having the second greatest impact is that of the wife's education. A wife with only "elementary" school is 22.8 per cent less likely to be in the labour force than a woman with "university" education. As suggested before, this reflects both the pull of the greater earning power of the well-educated women (or, alternatively, the income foregone by staying at home) and the alleged desire for a greater sense of fulfillment which she might achieve by going to work.

Her residence is the third most important factor in determining whether a wife in this age group will be in the labour force. A young married woman living in a larger urban area is almost 15 per cent more likely to be in the labour force than her rural farm counterpart.

Apparently the least important factor in determining her labour force status is her husband's education. The data support the statement that the better educated the husband, the less likely his wife is to work. Presumably the reason is the relatively high income he earns. However, for this age group a woman whose husband has elementary education is only 4.9 per cent more likely to be in the labour force than a woman whose husband has university education.

Age Group 25-34

Turning now to the second age group, we again find child status as the most important single factor in determining the labour force status of the married

³² We are aware that this criterion is influenced by our choice of classification for each factor. Thus it might be possible to make the education of the wife appear to be the most important factor simply by extending the classification to include wives with say only 4 years of schooling on the one hand, and those with post-graduate training on the other. However, with the exception of age, each of the factors were divided into four broad groups, and since no attempt was made to identify the most "extreme" groups the criterion which we have adopted probably gives a good guide to the relative importance of the factors.

woman. Married women in this age group are very likely to have young children at home, and for them the presence of younger children again proves to be a very strong deterrent to labour force participation, so strong, in fact, that a woman with no children is 37.7 per cent more likely to be in the labour force than a similar woman who has one or more young children.

For this second age group the presence of an older group of children (those aged 6-14) also becomes a consideration. But for women whose only children are in the 6-14 age group, and require substantially less continuing attention than younger children, there is less of a deterrent to go to work.

The wife's education is the second most important factor: a wife with elementary schooling is 16.5 per cent less likely to be in the labour force than a woman who went to university. The same arguments mentioned above favouring the labour force participation of the relatively well-educated wife apply to this age group and to the older age groups.

The husband's education plays a relatively more important role for wives in this age group than for younger wives. The 25-34 year old wife whose husband has at least some university education is 10.1 per cent more likely to be in the labour force than a woman whose husband has only elementary education, this compared to 4.9 per cent for the younger group.

The husbands of women in any age group are, on the average, about the same age as their wives. In many cases, and especially amongst the better educated, the young husband's current income will typically fall far short of his expected income over the next few decades. His wife, therefore, would have an additional incentive to go to work in order to even out the family's stream of income receipts, allowing them to attain a current level of consumption more closely approximating their longer run expectations than would otherwise be possible.³³

Residence ranks as the least important of the factors considered in determining the labour force status of wives in this age group, but not far behind her husband's education. A metropolitan wife is 8.6 per cent more likely to be in the labour force than her rural farm sister.

Age Group 35-44

The overall participation rate of married women is highest in this age group, at 32.4 per cent. Child status remains the most important single factor affecting a wife's labour force status, in that a wife with no children is 24.3 per cent more likely to be in the labour force than a wife who has children in the

'other' category (which is dominated by the presence of children in both the less than six and the 6-14 age brackets). The importance of child status has, however, fallen appreciably in its influence *vis-à-vis* the effect it had for the two previously considered groups of younger women. As one would suspect, the relative and absolute importance of the child status variable continues to decline as we consider still older groups of wives.

Education of the wife remains the second most important determinant, but its role has increased for the 35-44 age group *vis-à-vis* the 25-34 group. A wife with university education is now 19.2 per cent more likely to be in the labour force than a woman with only elementary education, this compared to 16.5 per cent for wives aged 25-34. The increased role attributable to her own education reflects the typical reduction in her child care duties, allowing her the freedom to enter the labour force.

The husband's education has also taken on an enhanced role: a wife whose husband has elementary schooling is both more likely to be in the labour force than her younger sisters, and less likely if her husband has university education. The increased role attributable to the husband's education (and hence to his current income and income prospects) reflects primarily the diminished role of the child status variable. Once the wife is largely freed from duties of raising young children she can give greater weight to other factors, of which her own potential earnings foregone (as indicated by her own level of education) is one, and her husband's income (as indicated by his level of education) is another.

The residence variable continues its decline in absolute importance; a metropolitan wife in this age group is only 6.9 per cent more likely to be in the labour force than a rural farm wife. For the 25-34 group the figure is 8.6 per cent, and for the 15-24 group, 14.8 per cent. The reduced importance of these residence and child status factors reflect the change in the family's position in its life cycle, and also the increased weight of consideration given to the education (income) variables.

Age Group 35-44

For the first time the child status variable no longer dominates the labour force participation of a married woman. The most important single factor for this age group is the wife's education: a university educated wife between the ages of 45 and 54 is almost 23 per cent more likely to be in the labour force than a wife with only elementary schooling. Such a woman is also relatively less likely to be in the labour force than her younger sisters if she has had little schooling, and more likely if she has at least some university education.

The education of the husband increases in its relative importance to second place. A wife whose husband has elementary schooling is 10.5 per cent more likely to be in the labour force than one whose husband has university education, whereas for her 35-44 year old sister the probability is 11.9 per cent.

³³ The explicit suggestion that the "permanent" level of such income variables has an important impact on the labour force participation of the wife, distinguishable from the effect of "transitory" levels, is made by Jacob Mincer, "Labour Force Participation of Married Women: A Study of Labor Supply", *op. cit.*, p. 69.

Child status is the third-ranking variable for the 45-54 age group. Clearly, for all but a few, the presence of very young children is no longer a consideration. Hence the distinction between "no children" and "some" children has become more nominal than real.

The residence variable again ranks last, having diminished substantially in its absolute importance: a metropolitan wife in this age group is only 2.5 per cent more likely to be in the labour force than her rural farm counterpart.

Age Group 55 - 64

In this, the oldest group of married women considered in the present study, the labour force participation rate at 18.67 is markedly lower than in any other age group. By the time a wife has reached this age her family's needs have normally been reduced. Little further expenditure is necessary to educate children, and generally her husband's income will have passed its phase of rapid growth. His income may rise in the few years remaining before retirement, but probably not by much. The wife, therefore, has lost the incentive of her younger counterparts to fill in the gap between her husband's current and expected income. That motive may now be, of course, replaced by the incentive to build up an adequate retirement fund, although a woman in this age range is less likely, than is a younger woman, to find so wide a range of attractive job opportunities open to her.

Both residence and child status have virtually disappeared as determinants of the wife's labour force behaviour. By far the most important factor remaining is her own level of education (and hence potential income from labour force participation): a

woman with university education is 16.1 per cent more likely to be in the labour force than a woman with only elementary schooling. Thus even the importance of this variable has declined; the comparable figure for the 45-54 year bracket is almost 23 per cent.

Her husband's education remains an important explanation of a wife's labour force behaviour, but its role has diminished. The wife of a husband who has elementary schooling is 6.6 per cent more likely to be in the labour force than one whose husband has university education. The comparable figure for the 45-54 group is 10.5 per cent. It is evident, therefore, that a marked reduction in the importance of this factor has occurred.

Summary

Recapitulating, Table 1 provides us with the basis for an analysis of the labour force participation rates for married women between the ages of 15 and 64, first of all with age as a variable and then controlling for each of five age groups separately. From the table we have been able to consider various "typical" wives and to suggest the causes of the divergent labour force participation behaviours for women in the various age groups.

Starting with the group of all women together, we found that we could explain about 72 per cent of the variation in their labour force behaviour. In looking at each of the five age groups separately we found that we could explain between 79 per cent and 87 per cent of the variation. By looking at more narrowly defined subdivisions of the group of major interest we were able not only to increase the degree of explanation achieved, but also to learn much more about the changing roles of the various important attributes which we have discussed.

ANALYSIS OF THE WIFE'S LABOUR FORCE STATUS: THE FOCUS ON AGE AND RESIDENCE DIFFERENTIALS

In an attempt to carry the study one step further, it was decided to look at still finer subdivisions of married women by analysing the determinants of the labour force status of wives in each of the residence categories by age groups. The result is presented in Table 3, in which each age group of married women is subdivided by the residence classification with the results of a multiple regression analysis reported for each of the subdivisions. The ranking of the factors in order of their importance for each of the age and residence groups is reported in Table 4. The interpretation and analysis of these results proceeds on the same basis as for Tables 1 and 2.

Overall Measure of Goodness of Fit

Looking first at the row reporting R^2 , the coefficient of multiple determination, one can see that the proportion of the total variation in the labour force behaviour which can now be explained has

risen substantially. For the youngest group, for example, while the measure on the basis of the entire group taken together was .85, the R^2 measures for three of the four subdivisions are higher than .85, and the fourth is .80. A similar statement holds for each of the other finer breakdowns.

Analysis by Age Groups

Age Group 15 - 24

The breakdown by the residence variable of the youngest group of wives in our study leads to a confirmation of what one would probably have expected.

First, the mean participation rates (the common terms) vary from a high of 40.07 for metropolitan wives to 25.24 for rural farm wives. The generally greater availability of employment opportunities for women in larger centres would account for much of

the difference. And perhaps differences in social attitudes would also have some impact of it is generally better accepted in large centres than in small that married women should work.

For each of the residence groups the child status variable is of great importance. But its relative importance is clearly greatest for the metropolitan wife. For the rural non-farm and rural farm wives, and even for other urban wives, the education of the wife is of approximately equal importance in determining a wife's labour force status. Why the child status variable should be of diminishing importance as one moves from larger to smaller centres is open to conjecture. Perhaps it is easier and cheaper in smaller centres to arrange for child care and for other domestic help since the travelling time is usually less and wages rates are generally lower.

The education of wife variable is an increasingly important factor the smaller the centre. Perhaps this reflects a relative scarcity of well educated

women in smaller centres, such that those with a relatively advanced education, experience a much stronger pull into the labour force than would a comparable metropolitan wife. It is not unusual for a well educated woman living in a smaller centre to be actively sought out and offered employment, a practice less common in larger centres.

The education of husband variable, which is included as a proxy for his income, is consistently found to be the least important determinant of the young wife's labour force status. However, it is again interesting that this factor plays an increasingly important role as one moves from larger to smaller centres. That is, a relatively high income earned by the husband is a stronger deterrent to labour force activity on the part of his wife in a smaller centre than in a large one, an outcome reflecting the differences in social attitudes in centres of varying sizes, and perhaps also the lower costs and more limited range of social activities available.

TABLE 3. Analysis of the Labour Force Participation Rates of Married Women, Canada, 1961
(Standardized by residence variable)

| Variable or attribute | Age group | | | | | | | | | | | |
|----------------------------|-----------|-------------|----------------|------------|---------|-------------|----------------|------------|---------|-------------|----------------|------------|
| | 15-24 | | | | 25-34 | | | | 35-44 | | | |
| | Metro | Other urban | Rural non-farm | Rural farm | Metro | Other urban | Rural non-farm | Rural farm | Metro | Other urban | Rural non-farm | Rural farm |
| Education of wife: | | | | | | | | | | | | |
| Elementary | - 8.70 | - 13.84 | - 14.64 | - 6.25 | - 5.04 | - 9.47 | - 10.64 | - 2.65 | - 6.98 | - 9.65 | - 10.51 | - 4.59 |
| 1-3 years secondary | - 1.90 | - 3.83 | - 7.81 | - 7.22 | - 2.32 | - 2.67 | - 6.02 | - 4.56 | - 2.71 | - 3.60 | - 5.41 | - 5.73 |
| 4-5 years secondary | 4.85 | 6.23 | 4.15 | 1.22 | 1.30 | 2.28 | 1.89 | - 0.14 | 1.99 | 2.23 | 0.94 | - 1.11 |
| University | 5.74 | 11.43 | 18.30 | 12.25 | 6.05 | 9.86 | 14.77 | 7.35 | 7.69 | 11.03 | 14.99 | 11.43 |
| Education of husband: | | | | | | | | | | | | |
| Elementary | 0.38 | 0.71 | 0.89 | 3.31 | 4.71 | 3.70 | 4.25 | 5.32 | 6.01 | 5.17 | 5.26 | 2.79 |
| 1-3 years secondary | 0.60 | 2.78 | 2.59 | - 0.04 | 1.89 | 4.16 | 2.17 | 0.14 | 3.67 | 4.85 | 3.19 | - 1.19 |
| 4-5 years secondary | 0.53 | 0.26 | 0.37 | 1.72 | - 0.83 | 0.23 | - 1.06 | - 2.40 | - 1.55 | 0.50 | - 0.11 | - 0.29 |
| University | - 1.51 | - 3.75 | - 3.86 | - 4.99 | - 5.77 | - 8.09 | - 5.35 | - 3.05 | - 8.13 | - 10.52 | - 8.34 | - 1.31 |
| Child status: | | | | | | | | | | | | |
| No children | - 22.54 | - 19.07 | - 14.37 | - 9.87 | 31.18 | - 25.93 | - 20.04 | 14.91 | 19.15 | 15.19 | 10.93 | 8.10 |
| Children less than 6 | - 22.54 | - 19.07 | - 14.37 | - 9.87 | - 17.62 | - 15.07 | - 13.10 | - 9.13 | * | * | * | * |
| Children 6-14 | * | * | * | * | 5.95 | 4.92 | 5.53 | 3.35 | - 5.34 | - 3.40 | - 1.37 | 0.41 |
| Other | * | * | * | * | - 19.50 | - 15.78 | - 12.47 | - 9.13 | - 13.81 | - 11.79 | - 9.56 | - 8.50 |
| Common term | 40.07 | 34.34 | 26.33 | 25.24 | 33.44 | 28.90 | 25.70 | 24.85 | 36.67 | 33.13 | 30.03 | 29.80 |
| R ² | .97 | .96 | .88 | .80 | .96 | .96 | .92 | .84 | .95 | .94 | .89 | .78 |
| | 45-54 | | | | 55-64 | | | | | | | |
| | Metro | Other urban | Rural non-farm | Rural farm | Metro | Other urban | Rural non-farm | Rural farm | | | | |
| Education of wife: | | | | | | | | | | | | |
| Elementary | - 8.14 | - 10.43 | - 11.69 | - 6.18 | - 5.00 | - 6.62 | - 8.40 | - 3.57 | | | | |
| 1-3 years secondary | - 3.61 | - 5.42 | - 7.23 | - 8.62 | - 3.34 | - 4.78 | - 6.40 | - 6.05 | | | | |
| 4-5 years secondary | 2.15 | 2.25 | 1.40 | 0.01 | 0.66 | 1.68 | 1.04 | 0.05 | | | | |
| University | 9.60 | 13.81 | 17.52 | 14.78 | 7.68 | 9.73 | 13.76 | 9.57 | | | | |
| Education of husband: | | | | | | | | | | | | |
| Elementary | 5.33 | 5.08 | 3.04 | 2.83 | 3.38 | 3.09 | 2.89 | 2.46 | | | | |
| 1-3 years secondary | 3.63 | 4.06 | 4.06 | 0.38 | 2.52 | 3.00 | 1.61 | 1.43 | | | | |
| 4-5 years secondary | - 1.26 | - 0.96 | - 0.08 | - 0.28 | - 1.47 | - 1.23 | - 1.09 | - 1.89 | | | | |
| University | - 7.70 | - 8.18 | - 7.02 | - 2.93 | - 4.44 | - 4.86 | - 3.41 | - 2.00 | | | | |
| Child status: | | | | | | | | | | | | |
| No children | 8.13 | 5.88 | 3.03 | 2.52 | 1.65 | 1.04 | - 0.67 | 0.77 | | | | |
| Children less than 6 | * | * | * | * | * | * | * | * | | | | |
| Children 6-14 | - 4.21 | - 2.67 | - 1.44 | - 0.37 | * | * | * | * | | | | |
| Other | - 3.92 | - 3.20 | - 1.59 | - 2.15 | - 1.65 | - 1.04 | 0.67 | - 0.77 | | | | |
| Common term | 30.62 | 29.84 | 30.53 | 28.17 | 17.82 | 17.80 | 20.56 | 18.50 | | | | |
| R ² | .92 | .91 | .86 | .91 | .86 | .85 | .83 | .83 | | | | |

*Category excluded because too few observations available.

Age Group 25 - 34

For the second youngest group of married women the enhanced explanatory power achieved by working with each residence group separately is again evident from the increased value of R^2 .

Child status remains the most important single factor influencing the labour force status of this group of women. Again its strength appears greatest in the larger centres, a conclusion surprising to those who think that there are better child care facilities available in larger centres. In fact, the scarcity of child care centres is a problem in most places, large or small.³⁴ Perhaps the presence of young children in a smaller centre is less of a labour force deterrent, first, because the costs of hiring a sitter are usually less (distances are shorter, and wage rates typically lower) and, second, because the family structure in small centres is frequently such that young children can be left in the care of relatives.

The wife's education remains the second most important determinant of a wife's labour force status, and again is a more potent factor in small communities than in larger ones (excepting the rural farm category). While this outcome may appear surprising, one could hypothesize that it reflects both the relatively high level of demand in smaller centres for well educated women and the relatively low level of demand for the poorly educated.

The husband's education (income) still ranks third in the order of importance, but is much closer to a second-place position than it was for the younger wives. This circumstance may result more from the reduced importance of the role of her education rather than an enhanced role attributable directly to her husband's position.

Age Group 35 - 44

This group ranks in the centre position of the five we have defined; it also has the highest participation rate of all, the second highest being for the youngest group. Intervening is a period of high fertility rates for married women at which time many leave the labour force either permanently or temporarily.

Here again the subdivision by type of residence is most informative, and the proportion of the variation in labour force behaviour which can now be explained has risen in each of the cases.

As we noted with the previous cases, the average participation rate tends to be lower the smaller the centre.

For this middle group the child status variable continues to be an important one. And again its relatively greater importance in urban centres *vis-à-vis* smaller centres is striking.

³⁴ "Day Care Services for Children of Working-Mothers", *op. cit.*

While the child status variable continues to dominate for metropolitan and (to a lesser extent) other urban wives, it is of no greater importance than the education of the wife in rural farm communities and is actually displaced by the education of the wife variable in rural non-farm centres. The education of husband variable has gained in strength, as compared to its importance for younger women.

In other words there has been a substantial evening out of the relative importance of the factors which a wife apparently weighs regarding her labour force status. The child status variable has lost the clear dominance which it had for younger wives, and both the education of the husband and of the wife have risen in importance.

Age Group 45 - 54

The overall participation rate for married women in this age group remains high for all residence categories. There is, in general, a tendency for women in the 45-54 age bracket to be somewhat less active labour force participants than the 35-44 year olds, and the difference is most marked amongst metropolitan wives.

For women in all residence groups the education of wife variable has become clearly dominant, with its relative weight being greatest in the smaller centres. Education of the husband has become the variable ranking second in importance in determining the wife's labour force status. The enhanced role attributable to this variable reflects primarily the greatly diminished role of the child status variable for women in this group. The education (and hence income) of the husband has therefore become a much more important matter for consideration: there is less to keep the wife out of the labour force, while the forces tending to place her in the labour force may have gained in strength.

For all residence groups child status ranks third amongst the factors considered. It has become a quite unimportant consideration for wives in the smaller centres, while it retains substantial, though greatly diminished, significance for wives in larger centres. For all age groups we have found the child status variable to be a much more important consideration for wives in larger centres than in small. For this age group of women, for whom the presence of children younger than six is uncommon, one could not argue that the relative importance of the child status variable in the larger centres results from the lesser availability of child care services. But it may reflect the phenomenon that women working in the larger centres usually find it necessary to be away from the home a larger portion of the day (e.g., because of greater travelling time), which would leave them less time to be home caring for their (older) families.

Age Group 55 - 64

At 18.67 per cent the mean participation rate for the oldest group of married women in the current study is also the lowest. The sharp reduction in

labour force participation occurs in all residence areas, with the largest centres showing the greatest decline.

For each residence group the rank ordering of the three factors is the same as for the 45-54 age group: education of wife, education of husband, and child status. In line with the generally lower participation rates is the reduced importance of each of the factors separately. Child status has virtually disappeared as a consideration, and the education of the wife continues to be the dominant factor determining her labour force status.

For most families in which the wife is in this age group, major family expenditures have declined

and many probably ceased. By and large, children are no longer financially dependent; most major assets have been acquired and perhaps fully paid for. In other words, many of the forces which caused the wife to be in the labour force have now subsided, and she remains in the labour force more out of personal preference than was the case earlier in her career. This is reflected in the increasingly important role which our study attributes to the education of the wife. At all ages a better educated person is able to demand the more desirable forms of employment; with the need for continued income reduced, the older wife is able to give increasing weight to her own judgement of how desirable she finds her employment.

TABLE 4. Ranking of Labour Force Participation Incentives
(Standardized by residence variable)

| Variable or attribute | Age group | | | | | | | | | | | |
|---|-----------|-------------|----------------|------------|-------|-------------|----------------|------------|-------|-------------|----------------|------------|
| | 15-24 | | | | 25-34 | | | | 35-44 | | | |
| | Metro | Other urban | Rural non-farm | Rural farm | Metro | Other urban | Rural non-farm | Rural farm | Metro | Other urban | Rural non-farm | Rural farm |
| Percentage gap between strongest incentive and disincentive | | | | | | | | | | | | |
| Education of wife | 14.44 | 25.27 | 32.94 | 18.50 | 11.09 | 19.33 | 25.41 | 12.91 | 14.67 | 20.68 | 17.16 | 25.50 |
| Education of husband | 2.11 | 6.53 | 6.45 | 8.30 | 10.48 | 12.25 | 9.60 | 8.37 | 14.14 | 15.69 | 4.10 | 13.60 |
| Child status | 45.08 | 38.14 | 28.74 | 19.74 | 40.68 | 41.71 | 33.14 | 4.04 | 32.96 | 26.98 | 16.60 | 20.49 |
| Rank ordering of the above factors | | | | | | | | | | | | |
| Education of wife | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 |
| Education of husband | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Child status | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| 45-54 | | | | | | 55-64 | | | | | | |
| | Metro | Other urban | Rural non-farm | Rural farm | Metro | Other urban | Rural non-farm | Rural farm | | | | |
| Percentage gap between strongest incentive and disincentive | | | | | | | | | | | | |
| Education of wife | 17.74 | 24.04 | 29.21 | 23.40 | 12.68 | 16.35 | 22.16 | 15.62 | | | | |
| Education of husband | 13.03 | 14.26 | 11.08 | 5.76 | 7.82 | 7.95 | 6.30 | 4.46 | | | | |
| Child status | 12.34 | 9.09 | 4.62 | 4.67 | 3.30 | 2.08 | 1.34 | 1.54 | | | | |
| Rank ordering of the above factors | | | | | | | | | | | | |
| Education of wife | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| Education of husband | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| Child status | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | |

SUMMARY AND CONCLUSIONS

In the preceding pages we have looked closely at the determinants of the labour force participation rates of wives of various age and residence groupings, attempting to distinguish the influence of various important factors. Can we now draw some conclusions, and suggest the probable future course of married women participating in the labour force?

First, by way of summary, we have obtained a good quantitative impression of how various important influences affect the labour force participation of the wife at various stages in her life cycle, and in her family cycle. We have been able to distinguish these separate impacts for wives living in centres varying in size, and to compare one with another.

We have seen that the presence or absence of a young child remains, in the aggregate, the most important single attribute affecting a wife's participation in the labour force until age 44. However, the influence of this factor is uniformly stronger in the large centres than it is in the small, and actually drops to second place for wives in the rural non-farm and rural farm areas who are in the 35-44 age group. We have suggested that the greater relative importance of the child status variable in larger centres *vis-à-vis* the smaller ones reflects the greater availability of inexpensive child care in the smaller centres resulting in part from the shorter distances and greater ease in local travel. As a result the presence of a young child provides a substantially smaller deterrent to the labour force participation of wives in the smaller centres.

As we look at older groups of women the presence of a young child becomes increasingly rare. For wives in both the 45-54 and the 55-64 age groups the child status factor is the least important factor of those considered. However, as for younger women, it remains more important for "urban" than for "rural" wives.

The education of the wife is a very important variable in explaining her labour force activity. Other things equal a better educated woman is much more likely to be in the labour force than one who is less well educated. For all women the education factor increases in relative importance with age, reflecting primarily the diminished importance of the child status variable. Again there appears to be some distinction by the size of the centre in which the wife lives. By and large, for wives in the smaller centres, education plays a more important role than it does for their city sisters.

The education of the husband variable, which we use as a proxy for both his current income and his anticipated future income positions, is of relatively little importance for younger wives, but gains in relative significance for the older wives. For younger wives the child status factor is of such dominating importance as to obscure somewhat the effects of the others. No doubt the husband's income is always an important consideration for a wife's labour force participation, but it can play an important role only if the wife is free of household duties, especially the care of young children. It is only for somewhat older wives (the 45-54 and 55-64 groups)

that her husband's education (and hence income) becomes an important enough consideration to displace the (declining) influence of child status.

Considering the influence of all these factors together what can one predict of the future course of the labour force participation of married women? Forecasting is notoriously difficult and inaccurate, and we shall not attempt more than to indicate tendencies.

1. The general improvement in the average level of education is likely to induce more and more wives to remain in the labour force after they are married, and to return to it when their major child-raising responsibilities in the home are passed. This factor alone would suggest, therefore, a continuing increase in the labour force participation rate of married women in most age groups. Even for women in the most fertile age group (25-34), an increased availability of day nurseries and other substitutes for the mother's constant attention would permit increased participation rates in the future.
2. Any change in fertility patterns, brought about, for example, by the wider use of highly effective means of birth control, could be expected to have a pronounced impact on the labour force participation rates of married women. If couples decide to wait a few years after marriage before having children the wife is very likely to be in the labour force during that period. And there is evidence that such family planning has become a widespread phenomenon.³⁵
3. The general continuing rise in the husband's income will continue to act as a deterrent to the wife's labour force participation. It may be, however, that it will not become much more important than the evidence we have discussed above suggests that it was in 1961. What it may mean is that women with little formal education, who cannot command very high incomes, will increasingly tend not to be in the labour force. But a continued rise in the average level of education would counteract such a tendency, and very likely outweigh it substantially.

³⁵ Oral contraceptives were first available by prescription in 1961. In metropolitan Toronto in 1967, about half the women using any method of contraception were using the pill. See "Oral Contraception and the Fertility Decline in Canada, 1958-1968. A First Look at a Crucial Component in the Argument", by Kantner, J.F., Allingham, J.D., and Balakrishnan, T.R., a paper presented to the Population Association of America, Boston, April 17, 1968.