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RESULTS FROM THE 1984 FAMILY HISTORY SURVEY

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RESULTS FROM THE 1984 FAMILY HISTORY SURVEY

by Patricia Robinson

Housing, Family and
Social Statistics Division

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PREFACE

This report, one of a series of studies based on retrospective data collected by the 1984 Family History Survey, examines relationships between work interruptions and family-related events, particularly the birth of children. The survey data reveal significant differences between men and women in terms of the number of job interruptions and the reasons for them.

Obviously, work interruptions have a major bearing on an individual's lifetime earnings potential. The study of work histories of women, who, as the survey shows, are affected by discontinuities in the attachment to the work-force to a much greater degree than men, represents an essential element in any examination of economic disparities between men and women.

Patterns of work interruptions are changing over time. While women who are now 50 years of age and over tended to leave the labour force for extended periods of time not only upon the birth of a child but also upon marriage, women in younger age groups now usually remain at work after marriage or return to work with only relatively brief interruptions after childbirth.

The study offers to the reader many other relevant facts which were revealed during the analysis of the Family History Survey and which offer new insights into the factors which shape decisions affecting the level of participation of women in the labour force and with it their role in the society at large.

I.P. Fellegi,
Chief Statistician of Canada.

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HIGHLIGHTS

- Most women have worked on a regular basis at some point in their lives and of these women who have ever worked, 58% report having interrupted work for a year or more.

- The number of work interruptions of a year or more reported by survey respondents is small. Almost three quarters of the women who have interrupted their work activity have only experienced one such interruption.

- Family considerations (marriage, pregnancy, childcare or move to be with a partner) are cited as a reason for the first work interruption by 70% of women who experienced a first interruption.

- Work interruptions due to family considerations appear to be of longer duration than interruptions for non-family reasons.

- While job layoff is cited by few women overall as a reason for their first interruption, for never-married women, it is cited as a reason for the first interruption by about three out of ten women who had a first work interruption.

- Younger cohorts of women appear to have a greater attachment to the labour force compared with older cohorts of women.

- Most women work full time but women who re-enter the work-force after a first work interruption are more likely than women in general to be employed part time.

- Women with a university education appear to have a greater attachment to the labour force than women without a university education but the differences are small.

INTRODUCTION

On average, women in the Canadian labour market earn less than their male counterparts (Goyder, 1981) and experience less career mobility (Boyd, 1982). The occupational distribution is also quite different for men and women (Statistics Canada, 1984). Along with these realities, however, is the increasing presence of women in the paid labour force. Participation rates for women in Canada as in many other Western industrialized countries have risen quite dramatically and although the rates are still less than for men, it is evident that the role of women in the work-force is changing. Given women's dual roles as producers of goods and services both within the household and in the work-force, changes in women's labour force involvement are associated with changes in the family. In considerable part due to family reasons, women experience greater discontinuity in their work experience compared with men (see Burch, 1985). Discontinuities in experience (particularly a recent interruption) appear important with respect to earnings (e.g., Mincer and Ofek, 1982) and occupational attainment (Robinson, 1986). There has also been some dispute over discontinuous labour market experience as an explanation for occupational segregation (for opposing views, see Polachek, 1979 and England, 1984).

The Family History Survey conducted in February 1984 as a supplement to the monthly Labour Force Survey contains information not only on family history, in the sense of data on marriages, divorces, cohabitation and the birth of children but also on the work history of individuals. Employment history questions were asked in the final section of the Family History Survey. While not extensive, this section provides pertinent information on work interruptions. In addition to whether the respondent has ever worked on a regular basis and the year in which the individual first started working, participants in the survey were asked if they had ever stopped working for a period of one year or more. Work interruptions, then, in the Family History Survey refer to interruptions of a year or more. Shorter term work interruptions due to brief spells of unemployment or maternity leave are not captured in the survey. As such, then, the FHS provides only a partial picture of the extent of discontinuous activity in the labour market.

Relatively detailed information is available for up to four work interruptions with the date the interruption began and for respondents who returned to work, the duration of the work interruption. Full-time or part-time status is reported for the job at the time that the work interruption occurred and, if applicable, for the job the respondent had on his/her return to work. Persons who were not continuously employed were asked for the reason or reasons for each of their interruptions (up to the maximum of four interruptions). This question allows for multiple responses and while categories are provided, including childcare and illness or disability for example, respondents could also check the "other" category and specify any additional reasons for the interruption.

The Family History Survey provides an opportunity to assess the extent of work interruptions for Canadian women and the factors associated with such interruptions. Since work history data are obtained for all persons who have ever worked, attention is not restricted to those who are currently in the labour force.

The Family History Survey is not unique in Canada in obtaining data on work histories. A survey conducted by Statistics Canada in 1972 also obtained work histories although no public use tape was made available and the published report does not focus on interruptions (see **Earnings and Work Histories of the 1972 Canadian Labour Force,** Catalogue 13-557). In the intervening years between these surveys, considerable change is evident in women's work activity. The labour force participation rate for women in 1972, for example, was 40% but by 1984, 53% of women in Canada were in the labour force. The 1970s also witnessed changes in other demographic phenomena which are pertinent to women's roles. In the decade from 1972 to 1982, the general fertility rate (number of live births per 1,000 women, age 15-49) declined from 63 to 56. The divorce rate rose from 649 divorces per 100,000 married women aged 15 and over to 1,164 divorces per 100,000.

Several other surveys provide data on work histories in varying degrees of detail. While the Canadian Fertility Survey conducted in 1984 was primarily concerned with obtaining data on fertility, some retrospective information on labour market activity is available.(1) The work history data have not yet been extensively analyzed. The York University 1981 Social Change in Canada Survey (Quality of Life) contains some data on work interruptions (again, defined as interruptions of a year or more),

See footnote(s) at end of text.

but this information is only obtained for persons who were working at the time of the survey. The Canadian Class Structure Project in 1982 includes data on exits from the labour force of persons who were employed or looking for work at the time of the survey (see Boyd, 1985 for a discussion of female work interruptions based on these sources). As well as collecting work interruptions data for all persons who have ever worked, rather than only those currently in the labour force, the Family History Survey has another advantage over these other data sources: sample size. There are over 7,000 women in the Family History Survey whereas the total number of respondents (men and women) in either the Canadian Class Structure Project or the Social Change in Canada Survey of 1981 does not represent half that number.

While the FHS provides an excellent opportunity to examine the issue of work interruptions for all women who have ever worked on a regular basis, several limitations should be mentioned. No data are available on income. Several important issues such as the relation between economic status of the family and interruptions and the effects of discontinuous activity on earnings cannot be investigated. The work history data are subject to misreporting and the accuracy of recalling past events is likely to be related to age. While women are likely to remember the year of birth of their children or marriages, recalling the dates of entry, exit and reentry to the labour force is likely to involve some error. These issues are dealt with in Section II. Also the FHS contains no information beyond four interruptions and, as indicated earlier, no data on short-term discontinuities.

In this report on women's work interruptions, there are two major themes. One is an examination of the changes that have occurred in women's work activity. Many of the tables presented in the report provide distributions by age, and discussions based on the tables address the issue of changes in women's attachment to the paid work-force. The other theme is the relation between family building and women's work interruptions. This is explored mainly through an extensive consideration of the reasons reported for interruptions and the relation between reasons cited for the interruption and such factors as education and duration of time out of the work-force. Family formation may be viewed as beginning with the first birth of a child and the timing of this event in relation to the first work interruption is also examined. The report was not designed to provide an exhaustive study of work interruptions based on the FHS and further work is to be encouraged in this area.

The report is divided into several sections. Section I presents an overview of the findings while Section II provides some discussion of the Family History Survey from a methodological point of view. The emphasis in this section, however, is on the quality of the work history data. Inferences drawn from the analysis of the Family History Survey must be subject to any qualifications required due to considerations of data quality. Concerns regarding recall, for example, require that interpretations of some of the results be made with caution. Section III contains the analysis of the work history data organized on the issues of changes over time and the relation between family and work interruptions. Section III also addresses the relation between education (more specifically, postsecondary education) and work history. The final section provides a summary of findings.

I. OVERVIEW

This section provides an overview of the work history data before focussing in Section III on changes over time and the relation between family formation and work interruptions. Discussion is based on tabular analysis of the Family History Survey weighted sample data. Two points should be emphasized. First, work interruptions are interruptions of a year or more. No information is available on brief interruptions (i.e., those of less than one year's duration). Second, in the introduction, it was remarked that there may be some underreporting of interruptions, particularly in the case of older women. Some caution, then, is advised when making inferences concerning differences across age groups or over time.

Overall, 85% of women have worked on a regular basis, that is, they have held a full-time or part-time job that lasted six months or more. Older women, as one might expect, are somewhat less likely to have ever worked on a regular basis (see Table 1). While 93% of women in the 25-34 age group have ever worked, 81% of women in the 55-64 age group have ever worked. Of the 20-24 age group, 83% have ever worked on a regular basis which probably reflects the effects of full-time education (for age distributions of women who have ever worked and never worked, see Table 2).

Only women who have ever worked are at risk of interrupting their work activity. About 58% of women who have ever worked have stopped working at some point. The likelihood of an interruption occurring is related to the length of exposure to the risk of interrupting and young women, therefore, will be less likely than older women to have experienced a work interruption. Young women are overrepresented among continuously employed women: while women age 20-24 account for 14% of women who have ever worked, they represent 26% of continuously employed women (see Table 3).

TABLE 1. Per Cent of Women (Age 18-65) in Each Age Group Who Have Ever Worked on a Regular Basis

Age group	Per cent of women who have ever worked(1)
Under 20	51.7 (n = 368)
20-24	82.8 (n = 1,011)
25-34	93.5 (n = 2,000)
35-44	92.4 (n = 1,516)
45-54	88.7 (n = 1,162)
55-64	81.0 (n = 1,022)
65	75.8 (n = 115)
All ages	84.8 (n = 7,194)

(1) Ever worked means that the respondent has worked on a regular basis for six months or more at some point. The respondent is not necessarily currently employed. The base for the percentages is the number of women in the age group who responded to the question. Overall, less than 1% of women did not respond to the question.

Note: The percentages are derived from the weighted sample. "n" indicates the sample size (unweighted).

TABLE 2. Age Distribution of Women (Age 18-65) Who Have Ever Worked and Never Worked

Age group	Per cent ever worked by age	Per cent never worked by age	Per cent of all women this age group
Under 20	3.1	18.8	5.2
20-24	14.4	19.4	15.0
25-34	29.6	13.4	27.4
35-44	22.3	12.0	20.9
45-54	15.9	13.1	15.5
55-65	14.8	23.3	15.9
Total	100.0 (n = 6,103)	100.0 (n = 1,091)	100.0 (n = 7,194)

Note: Women who did not answer the question on whether they had ever worked are excluded (n = 62). The percentages were derived from the weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

TABLE 3. Age Distribution of Women (Age 18-65) Who Have Worked Continuously and Discontinuously

Age group	Continuous workers	Discontinuous workers	Per cent ever worked
Under 20	6.8	0.4	3.1
20-24	26.2	5.8	14.4
25-34	33.5	26.8	29.6
35-44	15.8	27.1	22.3
45-54	10.2	20.0	15.9
55-65	7.5	20.0	14.8
Total	100.0 (n = 2,403)	100.0 (n = 3,700)	100.0 (n = 6,103)

Note: Women who did not answer the question on ever worked are excluded. The percentages are derived from the weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

The percentage distribution of the number of work interruptions for women who have worked and for women who have ever interrupted is shown in Table 4. Of all women who have ever worked, 42% have been continuous workers and the same percentage have interrupted once. Only a very small fraction report three or more interruptions. Even when attention is directed to women who have experienced at least one work interruption, it is evident that most women have had few interruptions. Of women who have not been continuously employed, 73% report having had one interruption and only 21% report two interruptions. Age will of course make a difference, since the exposure to the risk of interruptions increases with age. Taking the 55-64 age group, 56% of women who have ever worked have interrupted once only and of interruptors in this age group, 70% report only one work interruption.(2) In other words, even women who have had a long exposure to the risk of interrupting report few work interruptions.

See footnote(s) at end of text.

TABLE 4. Distribution of Women (Age 18-65) Who Have Ever Worked or Who Have Ever Interrupted Work Activity, by Number of Work Interruptions

Number of work interruptions	Women who have ever worked	Women who have ever interrupted work(1)
	per cent	
None	42.1	--
One	42.0	72.6
Two	12.1	20.9
Three	3.1	5.4
Four	0.7	1.2
Total	100.0	100.0
	(n = 6,103)	(n = 3,700)

(1) The base for calculating these percentages is women who have interrupted work one or more times.
Note: The percentages are derived from the weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

Table 5 perhaps makes even more apparent the few work interruptions that women have experienced. This shows the average number of reported interruptions for women who have ever worked and for women who have ever interrupted, by age. These figures are likely to be slight underestimates since the FHS tape does not contain data on more than four interruptions. However, only 10 persons in the survey reported five or more interruptions. As indicated in Table 4, very few women report even four interruptions. The relatively low figure for average interruptions per ever-interrupted women in the 55-64 age group may reflect some underreporting of interruptions as discussed in Section II. The stereotype of women being frequent interruptors is not borne out by the Family History Survey data but it is worthwhile emphasizing again that work interruptions of less than one year are not recorded.

TABLE 5. Average Number of Work Interruptions for Ever-worked Women and Ever-interrupted Women, (Age 20-64) by Age Group

Age group	Average interruptions for ever-worked women	Average interruptions for ever-interrupted women
20-24	.24 (n = 816)	1.10 (n = 213)
25-34	.67 (n = 1,842)	1.28 (n = 1,033)
35-44	.98 (n = 1,375)	1.40 (n = 988)
45-54	1.06 (n = 1,008)	1.45 (n = 755)
55-64	1.07 (n = 804)	1.37 (n = 628)

Note: The averages are derived from the weighted sample. "n" indicates the sample size.

The first work interruption, then, appears to be particularly important: the majority of women who interrupt have had only one work interruption and to anticipate the later discussion concerning the relation between family formation, this interruption is likely to be associated with family considerations. Of women who had experienced at least one work interruption at the time of the survey, about one-third had not returned to work after the first work interruption. Of women with two or more interruptions, about 40% had not returned to work after the second interruption by the time of the survey. Return to work, like the other aspects of work history is time dependent: exposure to the risk of returning to work after an interruption increases with time so that some of those whose first interruption had not ended will likely return to work. The longer the interruption lasts though, the greater the difficulty may be of re-entering the work-force. Not only may job skills have depreciated during the interim (or be perceived by employers as having depreciated) but job search skills may have deteriorated. Exposure to the risk of returning to work will increase with time but other factors may come into play so that the longer the time out of the work-force, the less likely a return may occur. The difficulties of re-entering, particularly after a lengthy interruption may deter a return to work.

In general then, most women have participated in the labour force on a regular basis at some point in their lives and over 40% report continuous work activity, i.e., they have experienced no interruptions of a year or more. Section III looks at this picture in greater detail and it is in this section that the reader will find discussion of the relation between interruptions and marital status and an examination of the continuity of younger women compared with older women.

II. SURVEY METHODOLOGY AND DATA QUALITY

Section II is divided into two subsections. The first concerns the methodology of the survey, including information on the sample, data processing and sampling variability. The second subsection concerns data quality. This includes consideration of internal consistency, missing data and the problem of misreporting of information. Attention is focussed on the work history data.

Background and Sample Information

The Family History Survey, sponsored by the Housing, Family and Social Statistics Division of Statistics Canada, was conducted as a supplement to the February 1984 Labour Force Survey. Respondents eligible for the Family History Survey were identified from respondents to the Labour Force Survey, a monthly survey of Canadian households from which estimates are derived of labour force participation and unemployment rates. The Family History Survey was designed to collect retrospective data on family and work histories. Information on marriages, divorces, common-law relationships and any children respondents have had is provided so that for the first time in Canada, researchers have a large scale data set to examine family life-cycle events. Since work history data were also collected in the Family History Survey, it is possible to examine the relationship between family events and labour market activity in an historical perspective. The Census of Canada provides information on such items as marital status, number of children and labour market status but the census only provides a snap-shot of the Canadian population, a picture taken at one point in time. The Family History Survey, given the retrospective nature of the data, provides opportunities for research and analysis not found with census data.

The Family History Survey collected data from approximately 14,000 respondents, over half of them women. Respondents were between ages 18 and 65. The sample was selected to be representative of the national population except that excluded were residents of the Territories, Armed Forces personnel, residents of Indian reserves, inmates of institutions and foreign diplomats. The survey design for the FHS was based on the Labour Force Survey and since these groups are excluded from the target population for the Labour Force Survey, they are excluded also from the FHS. These exclusions represent approximately 2% of Canada's population. Details of the Labour Force Survey design can be found in **Methodology of the Canadian Labour Force Survey,** a Statistics Canada publication (Catalogue 71-526, 1976).

Surveys are always subject to some non-response but the extent of non-response is quite small: 12.7% of the initial sample refused to be interviewed. Respondents received a letter explaining the purpose of the survey and then interviews were conducted by telephone in the week following the monthly Labour Force Survey interview. Statistics Canada used a centralized telephone interviewing location in each of the regional offices. Telephone interviewing is being increasingly used for surveys since it is a cost effective method of administering questionnaires. Research has indicated that telephone interviews provide data comparable in quality to that obtained with personal interviews (see Groves and Kahn, 1979, for example). For sensitive information telephone interviews may have

advantages over personal interviews and since the Family History Survey requests information on sensitive topics such as cohabitation, there is clearly an advantage in terms of data quality in using telephone interviews. Eligible respondents who were without telephones or who would not provide the LFS interviewer with their telephone number were therefore excluded. These represented only about 2% of the original sample.

Data Processing

Editing of the data was done after the information was transmitted to Ottawa. The processing involved several stages with records being set up for each respondent on events (marriages, births, etc.). The consistency of the data was then checked and where inconsistencies appeared, checks were made with the questionnaire. The editing process ensures, for example, that two marriages are not reported as occurring at the same time for a given respondent and that dates for events are consistent with each other. Where correction of inconsistencies was not possible, the records were eliminated from the data file. Imputation was used where an event was reported but where the record was incomplete. Imputation reduces the amount of missing data by assigning a value for the missing observation based on the values of that characteristic obtained from a record matched in terms of basic criteria such as age, sex and marital status.

For the data in general, the extent of correction or imputation was small. Imputation of missing data was not used for the work history data. Instead, missing values were coded as such. Some discussion of the extent of missing data and other concerns with the quality of the work history data is contained in the next part of this section of the report. Additional comments on methodology can be found in **Family History Survey: Preliminary Findings** by Thomas K. Burch (Statistics Canada, Catalogue 99-955).

This report is based on the microdata tape made available for public use. The tape contains individual records of Family History Survey respondents and each record contains demographic and labour market information from the Labour Force Survey and retrospective data on work activity and family from the FHS. The file is rectangular in format so that no special computer programs or packages are required to handle hierarchical structures. Each respondent record allows for the maximum number of events reported in the survey (for example, up to three marriages). Where less than the maximum number of events occurred (for example, only one marriage) the space for the other events is filled with Not Applicable codes.

Statistics Canada preserves the confidentiality of respondents by including no individual identifying information. The microdata tape, therefore, serves the purposes of researchers by providing data at the individual level while at the same time ensuring that individual persons (or households) cannot be identified.

Sampling Variability

All samples are subject to chance fluctuation or sampling error. In a different sample, slightly different results might be found. Larger samples are likely to be more representative of the relevant population than small samples. The extent of sampling error is likely to be smaller than in small samples. The Family History Survey is a relatively large sample so that sampling error is unlikely to present a serious problem. However, in dealing with small groups within the sample, caution is necessary since results may reflect sampling error rather than the true situation in the population.(3) While the sample contains 7,256 women, for example, only 37 are age 25-34 and have ever worked and experienced three work interruptions.

Data Quality

An extensive assessment of the quality of the data is beyond the scope of this study.(4) Some assessment of quality is necessary, however, so that the findings can be put in the proper perspective. The discussion in this section addresses several issues. First, as mentioned earlier, the FHS sample was derived from the Labour Force Survey of February 1984. Some persons refused to participate in the FHS and a comparison of participation rates and unemployment rates from the two sources will indicate the extent to which persons refusing to participate in the FHS were unrepresentative. The concern here is with any possible bias that might occur if refusal to

See footnote(s) at end of text.

participate in the FHS is not random but systematically related in some way to a labour force characteristic. The second issue pursued is internal consistency and missing data and the third, misreporting of work history data.

Comparison of LFS and FHS

One would expect close agreement between participation and unemployment rates obtained from the surveys since the FHS was a subsample of the February 1984 LFS and the FHS labour force variable is the LFS labour force variable. Differences may reflect non-random refusal to participate in the FHS. The comparison between unemployment and participation rates as reported in the February 1984 LFS and as estimated from the FHS is based on the weighted sample data from the FHS (Table 6). There is very close agreement: based on a FHS and LFS comparison of LFPRs for six age groups (youngest being 17-19 and oldest, 55-64), the index of dissimilarity is only 4.3 and for unemployment rates 3.5.

TABLE 6. Comparison of Labour Force Participation and Unemployment Rates for Women, February 1984

Age group	Labour Force Survey		Family History Survey	
	Labour force participation rate	Unemployment rate	Labour force participation rate	Unemployment rate
	per cent			
15-16	28.8	15.0	--	--
17-19	55.1	20.3	57.8(1)	21.1(1)
20-24	73.0	15.1	74.0	14.5
25-34	67.8	12.0	69.2	10.8
35-44	68.1	8.8	67.8	9.2
45-54	57.9	8.7	56.0	8.2
55-64	33.4	7.8	34.9	10.3

(1) Estimates refer to women 18-19 years of age only.
Note: Labour Force Survey data are for February 1984, unadjusted rates (i.e., not corrected for seasonal variation).

Internal Consistency and Missing Data

Checks for internal consistency and for missing data on labour force and work history variables were made using the unweighted FHS sample. Unless otherwise specified, all numbers and percentages in this discussion of data quality refer to the unweighted sample.

Of the 7,256 women in the survey, only 62 do not report whether they ever worked. No work history data are available for these women. Work history data are available for 6,103 women who report ever having worked in the FHS and of these, 3,700 (61%) report at least one work interruption and, thus, are the source for information on interruptions.

Apart from the FHS variable EVRWK (Ever Worked), the occupation variable as reported in the LFS also provides a count of women who have never worked before. The FHS EVRWK variable indicates that 1,091 (15%) women report never having worked at a full-time or part-time job that lasted six months or more. According to the LFS occupation variable, however, only 482 (7%) women report never having worked before, i.e., far fewer according to the LFS. The response on the FHS ever worked question, however, is what determines whether subsequent work history questions are asked. A difference in definitions appears to account for the apparent discrepancy: women who have worked for less than six months at a job would not be counted as ever having worked by the FHS criteria for ever having worked, but they would be counted as having worked by the LFS criteria if there is no requirement of the job having lasted more than six months.

A second point arises from an examination of the occupation variable. According to the FHS documentation, this variable refers to **current** occupation as reported in the LFS. A tabulation of

occupation by the labour force status variable reveals that while all persons who are employed report an occupation, a considerable percentage of persons who are unemployed or not in the labour force also report an occupation. Of the 3,050 women who are not in the labour force, for example, 44% report an occupation. The LFS gathers data on current occupation and past occupation if the person has been employed in the past five years. The apparent difference here is a reflection of the FHS documentation: the occupation variable is not current occupation as indicated in the documentation for the FHS but current or recent occupation where recent occupation refers to previous occupation in the case of a person who was employed within the past five years.

For the 6,103 women who have ever worked, year of first job is available for 5,970 so that for 2% of cases, this variable is not reported. For these cases, it is not possible to examine duration of first work period, i.e., period between first-working and first interruption.

The interruption data appear to be internally consistent. Women who report two interruptions, for example, do not report duration of third interruption, etc. With respect to missing data, a small amount of non-response is evident. For duration of work interruptions, of women who interrupted at least once and did not remain out of the work-force, 4% failed to report the duration of the first interruption. Of women with two or more interruptions who did not remain out, 6% failed to report the duration of the second interruption. Similar patterns occur for women with three or more and four or more interruptions. Women who did not return to work (or at least had not done by the time of the survey) can not report the duration of an unended interruption. A relatively large proportion (39%) of women who interrupted at least once had not returned to work by the time of the survey.

Women who have interrupted should report a beginning date for all interruptions but the year an interruption ended can only be reported for completed interruptions. For a small number of cases, the year an interruption began or ended is not reported. Of women who interrupted at least once and for whom the duration of the first interruption is reported, (i.e., the first interruption was completed), for about 2% of cases the years the interruption began and ended are missing. About the same extent of missing cases occurs for women with at least two, three and four interruptions.

With respect to the reasons for work interruptions, few interruptors fail to give a reason for the work interruption. Of women who interrupted at least once for example, 99% provide at least one reason for their first work interruption.

In general then, the FHS data appear to be internally consistent and the extent of missing data is small. The next concern is more difficult to assess.

Misreporting of Work History Data

In using the FHS to explore the extent of work interruptions and factors associated with discontinuous labour market activity or to assess changes in the continuity of work activity, one has to address the issue of misreporting. Individuals may misreport the year of their first job, for example, or forget interruptions. Such problems, if they exist, may be more likely to be found among older women. These women may be less likely to remember correctly when they first started work (they may for example report the year of re-entry to the labour force after extensive time out to raise children as when they first started work) and they may forget early interruptions. Efforts were made to assess this primarily using the FHS data and the following discussion details the results of tabulations to try and uncover misreporting.

A tabulation of the decade women first started work by age group of women revealed that of 2,350 women, age 45 and over in 1984, 218 (9% of women in the age group) reported that they first started work in the 1970s or later. This implies an age at first job of over 30 for these women. This does not seem unreasonable given lower participation rates in the past.

Most women (70%) who had a first marriage and for whom the year they first started work is known had worked before marriage. Older women are less likely to have worked before marriage (Table 7). The number of years between first marriage and year first job began has also been examined. If women are misreporting age at re-entry to labour force after many years out as the year they first started working, then there would be a gap of many years between first marriage and the reported year of first-working. While there are women for whom a lengthy time interval occurs, given the age of these women, they may well have not worked before marriage, spent many years as full-time homemakers and then began work. Eight per cent of women age 45-54 in 1984 began their first job 20 or more years after marriage and of women in the 55-64 age group, 17% reported that they first started work 20 or more years after first marriage. The latter figure does seem rather high when one considers that this implies starting work for the first time at a late age for a relatively high proportion of the older

women. Re-entering the work-force at these older ages is what one might expect given the changes that have occurred in participation but beginning work for the first time relatively late in life for this proportion of women seems rather unlikely.

TABLE 7. Per Cent of Married Women (Age 20-64) in Each Age Group Who Worked Before Marriage

Age group	Per cent of women in the age group who worked before marriage
20-24	76.2 (n = 307)
25-34	72.5 (n = 1,489)
35-44	72.5 (n = 1,277)
45-54	70.2 (n = 931)
55-64	64.0 (n = 745)

Note: This table is based on ever-married women who had ever worked and reported the year their first job began and the year of their first marriage. The percentages are derived from the weighted sample. "n" indicates the sample size.

One final check on this, however, is to examine age at first marriage for women who did not work before marriage. Women who first married relatively late and yet did not work before marriage may have misreported the year they first started work. Of women for whom year of first marriage and year first started work is available, 14% of women who married at age 25 or older did not work before marriage and of those who married at age 31 or older, 10% did not work before marriage. There may therefore be some misreporting of year of first job.

The possibility that older women may have forgotten early work interruptions is examined for women who have interrupted at least once. It was expected that older women would not, except in a few cases, continue working after the birth of a first child (i.e., birth of a first child would result in a work interruption). Out of all 3,700 women (all ages) who interrupted at least once, 630 had a child in the period between first beginning work and first interrupting work. While participation rates for women with young children have increased considerably over time, one would not have expected women now in the older age groups to have continued working after having a first child. There are, however, around 200 women age 45 and over who, though they have interrupted at least once, had their first child before their first reported work interruption. This number represents 9% of women in the 45 and over age group.

Some comparisons were made between the Family History Survey and the York Social Change in Canada Surveys using **weighted** sample data. The latter surveyed in three phases: 1977, 1979 and 1981 and from these surveys, a merged file was formed. For comparison with the FHS data, women were selected from the York data if they were interviewed in 1981, the closest survey date to the time of the FHS and if they were working in 1981, since the interruption data in the York Survey is only available for working women. Comparability considerations required that from the FHS, employed women be selected. In the York data, 48% of employed women report that they have at some time stopped working for a year or more while in the Family History Survey, 41% report that they have stopped work. The small sample size of the Quality of Life Survey makes comparisons by age hazardous. It does look, though, as if either the Family History Survey may have some underreporting of interruptions or the York data have some overreporting. The form of the question in the York Survey may have elicited more "yes" responses since the question on whether the individual had ever stopped working for a year or more was preceded by the sentence, "Some people have stopped working for a time for such things as family responsibilities or to go back to school".

As well as some difference between the two data sets in the percentages of women reporting that they had interrupted for a year or more, the average number of reported interruptions for women who have interrupted at least once appears higher in the Quality of Life data. Comparisons are made difficult on this point because the Family History Survey only records up to four interruptions and in the Social Change in Canada Survey information is not provided on the exact number of interruptions and instead there is a category of "two or more interruptions". In other words, the York data estimates of the average number of interruptions will be an underestimate (since the category "two or more" was treated as two interruptions in the comparison). Despite this, the Family History Survey relative to the Quality of Life data reveals a lower level of reporting on work interruptions.

Summary

In conclusion then, the data on labour force and work interruptions are generally internally consistent. While there are some missing data concerning labour force characteristics and work interruptions, the extent of missing data is small. There are some reservations concerning the data for older women. There may be some misreporting of the year of first job (YRFSTWK). Some women may be reporting the year they re-entered the labour force after an extensive period out of the labour force. There may also be some misreporting in the form of forgetting work interruptions since there are a number of older women who had already had a first child before a work interruption occurred. Comparisons with the Social Change in Canada Survey suggest that either the York survey has some **overreporting** of interruptions or the Family History Survey has some **underreporting** of work interruptions.

The impact of misreporting if it occurs mainly with older women will be to understate the extent of changes in continuity between older and younger cohorts. In other words, any tendency for younger cohorts to exhibit greater attachment to the work-force compared with older cohorts will be minimized. To the extent that misreporting has occurred for older women, we will obtain an untrue picture of older women's labour market activity and in particular may have an unclear image of the relation between family building and interruptions for these women.

III. WOMEN'S WORK INTERRUPTIONS

First, an assessment will be made of the evidence from the FHS concerning changing attachment to the labour market. This is accomplished through a comparison of the experience of different age cohorts. Second, the concern will be with the factors of marriage and family in relation to women's work interruptions. This does not imply that family considerations are irrelevant to men's labour market activity. Family considerations may well influence the kind of work men do or the hours (e.g., whether they will work shifts) or the location of employment (availability of schools in the area, etc.). However, men interrupt their work activity much less than women do (see Burch, 1985) and men are not considered here.

Changing Patterns of Labour Force Attachment

Overall, labour force participation rates of women have increased over the past few decades (see Armstrong and Armstrong, 1984) and even over the past 10 years (see Statistics Canada, 1985). Boyd (1985) has suggested that these changes in women's participation rates (which are evident whether one looks at all women, married women or women with young children) may indicate an increase in women's attachment to the labour force. A rise in participation rates does not necessarily imply an increase in the continuity of women's work experience. In fact, an argument could be made that participation rates may increase over time and yet the proportion of women with continuous work experience may at the same time decrease. This could happen if, for example, in the past, women in the labour force (when overall rates of participation were low) were more likely to be very career oriented (and thus more likely to participate continuously) whereas over time (as participation rates have increased), less career oriented women may have entered the work-force and these women if they have a lower level of attachment to the labour force will have the effect of **increasing** the extent of discontinuity. Using data on the continuity of employment for women in the labour force from the 1981 Social Change in Canada Survey and the Canadian Class Structure Project, Boyd found some evidence of increased attachment to the work-force on the part of younger women. She recognizes the problem of trying to differentiate age, period and cohort effects. Such a differentiation can only be done by making relatively strong assumptions (see Hobcraft, Menken and Preston, 1982) and some argue these attempts to separate age, period and cohort effects are even futile (Glenn, 1976).

Aside from the problem with age, period and cohort effects, in trying to determine whether changes have occurred in patterns of work interruption, it is necessary, as indicated earlier, to recognize that various aspects of work history are time dependent. The number of work interruptions, for example, is partly at least, a function of the length of time exposed to the risk of making an interruption. Young women in 1984 are likely to have fewer interruptions than older women in 1984, partly because they have had less time in which work interruptions can occur. Changes in the extent of continuous work experience cannot necessarily be inferred from, say, a distribution of the number of work interruptions by age where age is measured at the time of the survey. Nevertheless, with caution, it is possible to examine change over time in aspects of work history by comparing across age groups of women.(5) Finding evidence of change does not necessarily mean, though, that the change can be attributed to cohort effects since period effects are confounded with cohort effects.

See footnote(s) at end of text.

Does the FHS provide evidence of greater attachment to the work-force on the part of younger women? This question will be answered by reference to the experience of work before marriage and the age at which first interruptions occur, the duration of first interruptions and the level of attachment as indicated by whether women return to full-time or part-time employment after an interruption. Discussion of marriage and family building appears in **Work Interruptions and Family Formation.**

As indicated in the Overview, with respect to ever working, younger women are somewhat more likely compared with older women to have ever worked on a regular basis (see Table 1). We find that younger women are also more likely to have worked before marriage. Table 7 indicates the percentage who worked before marriage, by age for women who have married and reported the date of their first job. Overall, for about 70% of the women, their first regular job occurred before their first marriage. Three quarters of young women age 20-24 have worked before marriage compared with two thirds of women in the 55-64 age group. Given that some 20-24 year olds have not yet married for the first time (and therefore do not appear in this table) then by the time that age group reaches 55-64, an even larger proportion than the three-quarters will have worked before marriage. Part of the difference between this young and older age group is likely to be due to later age at marriage in more recent times which will have increased the likelihood of a first job occurring before a first marriage.

An attempt was made to examine age at first work interruption for women who had reported the date at which the first interruption had occurred. It might be expected that younger women may have made their first work interruption later than older women at the time of the survey. This expectation was not borne out by the data but this is likely to be due to the time dependence problem cited earlier. Older women have had a long period of exposure to the risk of making a first work interruption but women in the young ages have only had a brief exposure to this risk and **of those young women who have interrupted,** obviously, they will have been young when their first interruption occurred. Misreporting by older women may also be relevant here.

Another way to assess change over time is to consider the duration of the first work interruption. Since most women have only one interruption, it is this interruption that seems to be the most important in terms of women's experience. The durations referred to here are for completed first work interruptions. A problem arises here due to incomplete information. At the time of the survey, some women will not yet have returned to work after their first work interruption, so that for them, the duration of the interruption is incomplete. In the case of older women, few will likely make a **first** work interruption after the time of the survey that will end with a return to work so that for older women, if a first work interruption was to end with re-entry to the labour force, it has likely already been completed. For younger women on the other hand, some will not yet have interrupted work for the first time but such an interruption may occur in the future. Also, for some of these young women, the duration of the first interruption may be unknown because the interruption has not yet ended. For younger women in general then, the eventual duration of the first work interruption may well be longer than the first interruption of women who have completed that interruption and returned to work by the time of the survey. Rather than use the 20-24 age group in comparison with older women to assess change over time, the 25-34 age group can be compared with the 55-64 age group.(6) Women in the 25-34 age group are more likely than younger women to have ended a first work interruption so that information on the duration of the interruption for women age 25-34 is more complete than it would be for women age 20-24. For women in the younger age groups, the time dependence problem is likely to mean a downward bias in the duration data as it appears in Table 8 but offsetting that is a downward bias also for the older age groups. Some older women may have interrupted many years ago and never returned.

With all the above qualifications in mind, there is evidence of shorter durations for first work interruptions for younger women. Of women in the 25-34 age group with completed durations for the first interruption, 65% were out of the work-force for two years or less while for women age 55-64 at the time of the survey, only 27% had experienced such a brief first interruption. It is interesting to note that over a third of women in the older age groups had a first work interruption that lasted 10 years or more.

Another aspect of attachment to the work-force is full-time or part-time employment. Part-time employment generally brings fewer benefits than full-time work (see White, 1983) and may be associated with lower chances for promotion and perhaps lower wages, in part because part-time workers are less likely to be unionized. While women constitute the majority of part-time workers, most women in the work-force are full-time. Part-time workers comprise about one quarter of the female labour force. Are women who have interrupted more likely when they return to work to take part-time jobs? Continuing with the theme of changing attachment to the labour force, does it appear that when younger

See footnote(s) at end of text.

TABLE 8. Distribution of Women (Age 20-64) Who Interrupted Work Activity at Least Once, by Duration of First Work Interruption, Showing Age Groups

Duration of first interruption	Age group				
	20-24	25-34	35-44	45-54	55-64
	per cent				
Two years or less	90.6	64.8	42.3	28.7	27.2
Three to five years	9.4	24.0	22.6	17.5	16.0
Six to ten years	-	9.6	17.1	18.3	19.5
More than ten years	-	1.6	18.0	35.4	37.3
Total	100.0	100.0	100.0	100.0	100.0
	(n = 98)	(n = 597)	(n = 691)	(n = 466)	(n = 311)

Note: Duration refers to the length of completed interruptions. See text for discussion. Caution is necessary where these numbers are small. The percentages are derived from the weighted sample data. "n" indicates the sample size. Components may not add to totals due to rounding.

women return to work after the first interruption they are more likely to take a full-time job compared with older women on their return to work after a first interruption? Part-time work may be an attempt to combine family responsibilities with work activity. Part-time status may therefore be the outcome of women's choices but it may also be involuntary due to limited employment opportunities.

For women who have interrupted at least once, and returned to work, the relation between full-time or part-time status at the time of the first interruption and full-time or part-time status on return to work is examined (see Table 9). The number of part-time workers at the time of the first interruption is small (it was mentioned above that most women who work are full-time workers so this is to be expected) so that comments referring to five or ten year age groups should be taken as only suggestive of relationships since sampling error is a problem with small subgroups. It is apparent though that persons who interrupt are more likely to be in part-time jobs on return to the work-force after their first interruption compared with the proportions in part-time jobs before the interruption. At the time of the first interruption, only 9% report that they were part-time workers while after a return to work, 41% were employed part-time. This may not, of course, be through choice as economic conditions or the actions of employers may be responsible in part for this pattern. Of women who were full-time workers at the time of their first interruption, 38% were employed part-time on their return to work.

A look at the situation by age reveals that there is no clear evidence that younger women relative to older women are more likely to return to full-time employment after the first work interruption (see Table 10). For the 25-34 age group of women who were full-time when they first interrupted work, 38% were part-time on return to the work-force and for women 45-54, about the same percentage as in the younger age group who had been full-time workers took part-time employment when they re-entered the labour force (see last column, Table 10). The overall proportions who were full-time on return to the work-force was the same for both age groups.

A substantial minority of women who were part-time workers at the time of their first interruption became full-time workers on return. For women age 20-64 who had completed their first interruption by the time of the survey and who were working part-time when they first interrupted, 38% returned to full-time work when they re-entered the work-force (Table 9).

Is there evidence in the Family History Survey of younger women showing greater attachment to the labour force than older women? In terms of having ever worked on a regular basis, there is evidence that a somewhat higher proportion of younger than older women have held a job at some point for at least six months. Younger women appear more likely to have worked before marriage when compared with older women but part of this may reflect a later age at marriage in recent years. There is some evidence to suggest that the duration of first work interruptions may be shorter for more recent cohorts of women. With respect to full-time or part-time status at the time of return to the work-force after the first work interruption, if younger women have a greater commitment to the labour force than older women had when they returned after the first work interruption, one would expect to

TABLE 9. Per Cent of Women (Age 20-64) Employed Full Time and Part Time at the First Work Interruption and on Return to Work

Employment at the time of first interruption	Percentage distribution at the time of first interruption	Employment on return after the first interruption		Employment on return after the first interruption		
		Full-time	Part-time	Full-time	Part-time	Total
		per cent				
Full-time	91.0	94.3	86.2	61.5	38.5	100.0 (n = 1,975)
Part-time	9.0	5.7	13.8	37.8	62.2	100.0 (n = 201)
Total	100.0	100.0	100.0	59.3	40.7	100.0 (n = 2,176)
	(n = 2,176)	(n = 1,274)	(n = 902)			

Note: The table includes only women who interrupted at least once but had returned to work after the first interruption by the time of the survey and for whom full-time or part-time status was reported at the time of the interruption and at the time of the return to work. Percentages are derived from the weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

TABLE 10. Per Cent of Women (Age 20-64) Employed Full Time and Part Time at the First Work Interruption and on Return to Work, Showing Age Groups

Age group	At the time of first interruption:			Full-time workers at the time of the first interruption:		
	Per cent of women in age group working			Per cent who returned		
	Full-time	Part-time	Total	Full-time	Part-time	Total
20-24	82.3	17.7	100.0 (n = 100)	--	--	100.0 (n = 83)
25-34	88.6	11.4	100.0 (n = 604)	61.9	38.1	100.0 (n = 533)
35-44	93.4	6.6	100.0 (n = 694)	62.5	37.5	100.0 (n = 645)
45-54	91.7	8.3	100.0 (n = 465)	60.4	39.6	100.0 (n = 424)
55-64	91.6	8.4	100.0 (n = 313)	57.9	42.1	100.0 (n = 290)

Note: Numbers are very small for the youngest age group. Percentages are derived from the weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

see a higher proportion of younger persons who return to the work-force being full-time workers. No clear evidence was found for this but the economic climate may be a factor here. Younger women may have re-entered the labour force during the relatively depressed recent years. This might be a subject for future research.

In general then, there is evidence of greater attachment to the work-force. Canadian women have experienced considerable demographic change over the past decades not only in regards to the labour force, but also with respect to fertility (see Romaniuc, 1984). Fertility and labour force

participation tend to be associated but it is not clear if there is a causal relationship between the two (see for example, Cramer, 1980). Part of the changes in women's labour market attachment may reflect changes in the family, in particular, declining fertility. The relation between family formation and work interruptions is dealt with next in this section.

Work Interruptions and Family Formation

While changes have occurred in the family over recent decades, most noticeably in the area of fertility, although also in divorce, there has been relatively little change in the division of labour within the household (see Huber and Spitze 1983, Armstrong and Armstrong, 1984). Childcare as well as many of the household chores remain primarily the responsibility of women. The dual role of women as workers both within the household and in the labour market has several implications for women's labour force activity. Becker (1985) has suggested that one such implication is in terms of the allocation of effort to labour market activity: he suggests that given women's household responsibilities they will expend less effort in (labour market) work than men. Another implication of the role of women in the family is that women are more likely than men to interrupt their labour market activity for periods of a year or more (see Burch, 1985). A high proportion of these interruptions are likely to be related to family considerations.

Marriage may result in relocation or a move may take place to be with a partner. Spitze (1984) using United States data, found that migration has (at least initially) a deleterious effect on women's labour market status. Migration can lead to a break in employment continuity. Few women now leave work at marriage but in the past, marriage could mean the loss of a job. In some occupations, married women were not employed and in some cases these restrictions have only recently been lifted (see Ross and Reskin, 1984, Wilson, 1982).

Childbirth and childrearing may also prompt an interruption in work activity. Many women are likely to cease work temporarily given the provision of maternity leave but the Family History Survey will not capture any interruptions of less than one year's duration. Some women will leave work for a year or more to raise children and while marriage is less likely to be associated with an interruption for younger women, pregnancy and childcare are still likely to be major reasons for interruptions. If younger cohorts have a stronger attachment to the work-force, one would expect to find that family reasons would be less important for younger women compared with older women.

In this section, the relation between family formation and work interruptions is explored in several ways. Major events in family formation that are considered here are the first birth of a child and marriage. The relation between family formation and interruptions can be examined by reference to behaviour (the timing of the birth of a first child in relation to the first work interruption or the number of work interruptions by marital status) or to the reason given for an interruption. Both methods are used here. Given the importance of the first work interruption (most women have only one interruption resulting in a small number of cases with two or more interruptions) and since it is likely to be the first birth that increases the gender division of labour within the household and inaugurates a period of potential conflict between women's family and labour market roles, the emphasis is on first interruptions and first births.

Table 11 indicates that overall, a higher percentage of ever-married women than never-married women have ever worked. This is a reflection of the fact that never-married women are younger than ever-married women and for those age groups which can be compared (i.e., where the sample size is large enough), the percentage ever worked does not differ by marital status, except for the youngest age group. Never-married women in the youngest age group are probably more likely to pursue full-time studies than ever-married women in this age group, thus, accounting for the lower percentage of never-married women who have ever worked. Table 12 indicates the young age of never-married women who have ever worked.

Table 13 presents the number of work interruptions for ever-married and never-married women who have worked on a regular basis. Of never-married women, 78% have experienced no work interruptions whereas for women who have ever-married, only 32% report never having interrupted. Never-married women are, of course, likely to be younger than ever-married women and so part of this difference is a reflection of age. While some caution is necessary due to small cell sizes (which was the reason for the selection of the age groups in Table 14), controlling for age, never-married women appear less likely to interrupt. For the 25-34 age group, for example, 66% of never-married women have not experienced a work interruption while 43% of ever-married women have never interrupted. Among women 35-44, the difference is even more marked. In view of the expectation that family considerations are a major factor in women's interruptions, the finding that never-married women are more likely than ever-married women to have been continuous workers comes as no surprise.

A comparison of the duration of completed first interruptions for never-married and ever-married women (see Table 15) reveals that most never-married women interrupt for a short period of time (two years or less). For ever-married women, while 41% interrupted for the first time for two years or less, there are high proportions with long durations. It is worth emphasizing that since these are completed interruptions, these women have returned to work after the first interruption. Twenty-two per cent of ever-married women who returned to work after the first interruption had spent over 10 years out of the work-force.

TABLE 11. Per Cent of Ever-married and Never-married Women (Age 18-65) in Each Age Group Who Have Ever Worked

Age group	Per cent(1) of ever-married women this age who have ever worked		Per cent(2) of never-married women this age who have ever worked		Per cent(3) of all women this age who have ever worked	
Under 20	--	(35)	50.1	(333)	51.7	(368)
20-24	83.5	(376)	82.5	(635)	82.8	(1,011)
25-34	93.5	(1,625)	93.8	(375)	93.5	(2,000)
35-44	92.7	(1,420)	--	--	92.4	(1,516)
45-54	89.2	(1,095)	--	--	88.7	(1,162)
55-65	80.5	(1,077)	--	--	80.5	(1,137)
All ages	89.0	(5,628)	79.5	(1,566)	84.8	(7,194)

(1) This percentage is: $\frac{\text{(No. Ever-married Women in Age Group i Who Have Ever Worked)}}{\text{No. Ever-married Women in Age Group i}} \times 100$

(2) This percentage is: $\frac{\text{(No. Never-married Women in Age Group i Who Have Ever Worked)}}{\text{No. Never-married Women in Age Group i}} \times 100$

(3) This percentage is: $\frac{\text{(No. All Women in Age Group i Who Have Ever Worked)}}{\text{No. Women in Age Group i}} \times 100$

Note: Excluded are women who did not respond to the question. Numbers in parentheses are the sample sizes. The percentages are derived from the weighted sample. A "--" indicates sample size below 100, and observations and percentages are not reported for these groups.

TABLE 12. Age Distribution of Ever-married and Never-married Women (Age 18-65) Who Have Ever Worked

Age group	Ever-married women: per cent of ever-worked women this age group(1)	Never-married women: per cent of ever-worked women this age group(2)
Under 20	0.5	12.1
20-24	6.1	43.3
25-34	29.7	29.2
35-44	26.5	7.5
45-54	19.2	4.2
55-65	17.9	3.6
Total	100.0	100.0
	(n = 4,910)	(n = 1,193)

(1) This percentage is: $\frac{\text{(No. Ever-married Women in Age Group i Who Have Ever Worked)}}{\text{No. Ever-married Women Who Have Ever Worked}} \times 100$

(2) This percentage is: $\frac{\text{(No. Never-married Women in Age Group i Who Have Ever Worked)}}{\text{No. Never-married Women Who Have Ever Worked}}$

Note: Women who did not respond to the question on ever work are excluded. Percentages are derived from weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

TABLE 13. Distribution of Never-married and Ever-married Women (Age 18-65) Who Have Ever Worked, by Number of Work Interruptions

Number of work interruptions	Never-married women	Ever-married women	All women who have ever worked
	per cent		
None	77.6	32.0	42.1
One	19.1	48.5	42.0
Two	2.2	14.9	12.1
Three or more	1.0	4.6	3.8
Total	100.0	100.0	100.0
	(n = 1,193)	(n = 4,910)	(n = 6,103)

Note: Women who have ever worked are those who report they have worked on a regular basis at a job that lasted six months or more. Interruptions are defined as spells of non employment that lasted one year or more. The percentages are derived from weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

TABLE 14. Distribution of Never-married and Ever-married Women (Age 25-44) in Selected Age Groups, by Number of Work Interruptions

Number of work interruptions	Age 25-34		Age 35-44	
	Never-married women	Ever-married women	Never-married women	Ever-married women
	per cent			
None	65.8	42.6	73.3	26.3
One	26.5	43.9	23.2	51.5
Two	4.8	11.3	1.0	15.8
Three or more	2.8	2.1	2.4	6.4
Total	100.0	100.0	100.0	100.0
	(n = 344)	(n = 1,498)	(n = 84)	(n = 1,291)

Note: These are all women who have ever worked on a regular basis. See text for discussion of selection of age groups. Due to small sample size, caution is advised in interpreting the third distribution (never-married women, aged 35-44). The percentages are derived from weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

Turning from marriage to "expanded" family formation in the sense of the event of the birth of a first child, the timing of the first child is examined in relation to work activity. Here, women who have ever worked on a regular basis and for whom relevant dates are known (for example, the date of the first job) are considered. We look first at women who have been continuous workers and then women who have interrupted one or more times. For women who have been continuous workers, timing patterns are identified as no first child, a first child born before the first job and the first child born after the respondent started work (see Table 16). Of these continuously employed women, about 58% had not had a child by the time of the survey but almost a quarter had given birth to their first child after their first job began and yet never interrupted their work activity.

Viewing this another way, of the continuous workers who had at least one child, over one-half had their first child after first starting work but have not experienced a work interruption (at least, by the time of the survey). Table 16 presents the data separately for women of all marital statuses combined and ever-married women. Of ever-married women who were continuous workers, 36% had no first

TABLE 15. Distribution of Never-married and Ever-married Women (Age 18-65) by Duration of First Work Interruption

Duration of the first work interruption	Never-married women	Ever-married women	All women
	per cent		
Two years or less	81.9	41.4	45.2
Three to five years	13.3	20.8	20.1
Six to ten years	4.4	16.0	15.0
Over ten years	0.5	21.7	19.7
Total	100.0	100.0	100.0
	(n = 177)	(n = 2,017)	(n = 2,194)

Note: The table refers only to women with completed first work interruptions (i.e., where return to work had occurred by the time of the survey). Note that the duration refers to the duration of the **first** interruption experienced by women with one or more interruptions. Percentages were obtained from tables using weighted sample data. "n" indicates the sample size. Components may not add to totals due to rounding.

child compared with 12% of ever-married workers who had interrupted their work activity. In other words, ever-married women who have worked continuously are more likely to be childless than ever-married women who were discontinuous workers.

The issue of whether younger cohorts exhibit greater attachment to the work-force which was considered earlier in this section can be examined here too. Some caution is necessary again because of small cell sizes and to reduce this problem, comparisons will only be made between the age groups 25-34, 35-44 and 45-54. Of women in the 25-34 age group with a child and who were continuous workers, 76% had their first child between the time of first starting work and the time of the survey. For the other two age groups, the figures are 53% and 34%. This provides yet further evidence (although tentative because of small numbers) that women of more recent cohorts have a stronger attachment to the work-force. The event of having a child appears to be combined more readily with continuous work activity for younger cohorts. This is consistent with the trend in labour force participation rates of women with young children. Relative to older cohorts, younger cohorts of women appear more likely to have patterns of work activity characterized by work before marriage, more continuous employment and a greater degree of combining of family and work roles.

For women who have interrupted at least once, there are a number of possible patterns of timing of the first birth in relation to work activity:

- Some women will have had no children. Less than 20% of women who have interrupted and for whom relevant dates are reported fall into this category.
- Some women will have had their first child before beginning work for the first time. Only about 10% of women with discontinuous work activity exhibit this pattern.
- A first birth might occur at some time between first starting work and the time of the first interruption.
- The birth of the first child might have occurred at about the same time as the first work interruption.
- The first child may have been born at some time after the first interruption. This pattern would include cases where the birth occurred while the woman was still employed or where it coincided with later interruptions.

Of women who were not continuous workers and for whom relevant dates were reported, 29% of women gave birth to their first child at about the same time as their first work interruption occurred. "About the same time" is defined here as the period between the year before the interruption began up to and including the year in which the interruption occurred. The **year** in which an interruption began is reported but not the month so it is not possible to determine the exact timing of an interruption in relation to the birth of a child. Excluding women who had not had a first child, 35% of women with a discontinuous work record had given birth to their first child at about the same time as their first work interruption.

TABLE 16. Relative Timing of the Birth of a First Child and First Work Interruption for All Women and Ever-married Women (Age 18-65) by Continuity of Labour Force Activity

	Continuous workers			
	All marital status categories		Ever-married women	
	Per cent	As per cent of women with a first child	Per cent	As per cent of women with a first child
First child born before first job	18.2	43.7	28.4	44.2
Child born between first job and present	23.4	56.3	35.8	55.8
No first child	58.4	...	35.8	...
Total	100.0	100.0	100.0	100.0
	(n = 2,326)	(n = 1,084)	(n = 1,473)	(n = 1,010)
	Non-continuous workers			
	All marital status categories		Ever-married women	
	Per cent	As per cent of women with a first child	Per cent	As per cent of women with a first child
First child born before first job	10.7	13.0	11.4	12.9
Child born between first job and year before interruption began	9.1	11.0	9.7	11.0
Child born at about the same time as first interruption	29.0	35.3	31.2	35.5
Child born after beginning of first interruption	33.5	40.7	35.6	40.6
No first child	17.7	...	12.2	...
Total	100.0	100.0	100.0	100.0
	(n = 3,611)	(n = 3,014)	(n = 3,342)	(n = 2,943)

Note: Continuous workers are women who have worked on a regular basis and never interrupted their employment for a year or more and reported the year their first job began. Non-continuous workers are women who had interrupted at least once and for whom the year of first job is reported and the year the first interruption began. Percentages are based on the weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

In addition to observing the relation between actual family events (such as marriage or birth of a first child) and work interruptions, the Family History Survey provides data on the reasons for work interruptions. The question in the survey asks respondents for the reason or reasons for stopping work and provides several response categories including an "other" in which respondents could specify their reason(s). Multiple responses were permitted. Categories of reasons provided on the microtape are marriage; move to be with a partner; pregnancy or childcare (one category); return to school; retirement; laid off or job ended; own illness or disability and other reasons. The most frequently cited reasons for the first interruption given by women who had interrupted at least once were pregnancy and childcare (cited by 44% of the women) and marriage (17%). Each of the remaining reasons was mentioned by less than 10% of the women. Since several of the reasons relate to family considerations, a new category was formed by combining marriage, pregnancy or childcare and move to be with a partner. About 70% of women cited family considerations as the reasons for their first interruption (see Table 17). While family considerations remain a significant factor in subsequent interruptions, they emerge as somewhat less dominant: less than half the women with two or more interruptions cite family reasons for leaving employment for a second time, for example. The number of women in some categories of reasons becomes small for third and fourth interruptions but the continued importance of pregnancy and childcare is suggested by a quarter of women with three or more interruptions citing this as a reason for interrupting work a third time.

TABLE 17. Reasons Cited for Work Interruptions by Women, Age 18-65

Reason	Per cent of women citing this reason		
	First interruption	Second interruption	Third interruption
Family considerations	68.6	48.7	40.2
Pregnancy or childcare	44.3	37.2	25.0
Marriage	17.3	2.6	--
Job ended or laid off	8.8	19.5	--
	(n = 3,700)	(n = 961)	(n = 231)

Note: The base for per cent of women citing a reason as a cause of the first interruption is all women with at least one interruption; the base for the second interruption is all women reporting two or more interruptions; the base for the third is all women reporting three or more interruptions. Family considerations include pregnancy or childcare, marriage and move to be with a partner. Multiple responses were permitted for the question on the reasons for interruptions. A "--" indicates that percentage is not reported because of small numbers. Percentages were obtained from the weighted sample. "n" indicates the sample size.

Not all work interruptions are voluntary. Some might argue that interruptions for childcare reasons are not entirely voluntary in Canada where day care facilities may be limited. Apart from that argument, however, being laid off or a job coming to an end may bring about an involuntary work interruption. While these breaks in employment may tend to be of short duration (and so not captured by the FHS), a non-negligible percentage of women cite being laid off or the job ended as a reason for the work interruption. Of women who experienced one interruption (or more) only 9% indicated this as a reason for the first interruption but 20% of women with two or more interruptions stated it was a reason for their second interruption. Of never-married women, 28% cite layoff or job ended as a reason for their first work interruption (see Table 18).

Reasons other than family considerations seem to increase in importance somewhat in later interruptions but what is particularly evident is that family considerations are a significant factor (at least in terms of reasons stated) for all interruptions for ever-married women. With respect to first interruptions (and most women who interrupt report only one interruption), family reasons dominate all others.

When the relationship between reasons for the first work interruption and age of women at the time of the survey is examined, younger women are somewhat less likely to cite family reasons than older women. The reverse situation occurs for second interruptions: a higher proportion of younger women than older women cite family considerations as the reason for making a second interruption (see Table 19). Possible misreporting may be reflected in this table: the percentage of women 55-64 citing family reasons for the first interruption is relatively low.

TABLE 18. Reasons Cited for Work Interruptions by Ever-married and Never-married Women (Age 18-65)

Reason	Per cent of women citing this reason			
	First interruption		Second interruption	
	Never-married women	Ever-married women	Never-married women	Ever-married women
Family considerations	14.5	73.7	--	50.1
Pregnancy or childcare	10.3	47.5	--	38.5
Job ended or laid off	27.9	7.0	--	19.0
	(n = 281)	(n = 3,419)	(n = 40)	(n = 921)

Note: The base for per cent of women citing a reason as a cause of the first interruption is all women with at least one interruption; the base for the second interruption is all women reporting two or more interruptions. Family considerations include pregnancy or childcare, marriage and move to be with a partner. Multiple responses were permitted for the question on the reasons for interruptions. A "--" indicates that percentage is not reported because of small numbers. Percentages were obtained from the weighted sample. "n" indicates the sample size.

TABLE 19. Per Cent of Women (Age 20-64) in Each Age Group Citing Family Reasons for the First and Second Work Interruptions

Age group	Per cent of women in the age group citing family reasons for first interruption(1)		Per cent of women in the age group citing family reasons for second interruption(2)	
20-24	42.2	(213)	--	
25-34	65.0	(1,033)	55.8	(235)
35-44	77.0	(988)	54.3	(292)
45-54	75.6	(755)	49.6	(225)
55-64	65.8	(628)	35.2	(172)

(1) The first interruption includes all women who had experienced a first interruption (i.e., includes those with at least one interruption). The percentage is:

$$\frac{\text{No. Women in the Age Group With One or More Interruptions Who Cited Family Reasons for the First Interruption}}{\text{No. Women in the Age Group With One or More Interruptions}} \times 100$$

(2) The second interruption includes all who had experienced two or more interruptions.

Note: Family reasons include marriage, pregnancy or childcare and move to be with a partner. Percentages are based on weighted sample. Unweighted sample sizes are shown in parentheses. "--" indicates a sample size of less than 100.

As discussed earlier, durations refer here to completed interruptions, i.e., those ending with a return to work. Overall, 45% of first work interruptions are two years or less in duration and only 20% of first interruptions last more than 10 years before a return to work occurs (see Table 20). First interruptions occurring for family reasons, however, seem to be somewhat longer in duration. Only 34% of interruptions for family reasons are of short duration (two years or less) while 70% of interruptions for non-family reasons last only a short time. About one quarter of first work interruptions occurring for family reasons last a long time (over 10 years) compared with only 5% of interruptions for non-family reasons. The results for second and third interruptions show the same pattern: interruptions for family reasons appear to be of longer duration than those for non-family reasons. No comment will be made on fourth interruptions due to the small numbers.

It was reported earlier that there is some evidence that the duration of first work interruptions is shorter for younger cohorts of women compared with older cohorts. Since family considerations emerge as important reasons for work interruptions, particularly for the first interruption, the focus will be on family reasons. Of women age 25-34 at the time of the survey who reported that their first interruption was due to family reasons, 58% report that the interruption lasted two years or less compared with 18% of women aged 45-54 who reported that their first work interruption for family reasons was of short duration. Some underreporting may have occurred, particularly for older women. The qualifications mentioned earlier in connection with durations apply here too: some women, especially younger women, may not have begun or completed a first interruption and for these the duration is unknown. The pattern detected for first interruptions in which younger cohorts who interrupt for family reasons have shorter durations than older cohorts is also evident for second interruptions. The numbers are really too small in the case of subsequent interruptions.

TABLE 20. Distribution of Women (Age 18-65) by Duration of First Work Interruption, Showing Reasons for Work Interruption

Duration of the first work interruption	Overall distribution	Per cent of women citing family reasons	Per cent of women citing non-family reasons
Two years or less	45.2	34.5	69.9
Three to five years	20.1	21.2	17.6
Six to ten years	15.0	18.3	7.3
Over ten years	19.7	26.0	5.2
Total	100.0	100.0	100.0
	(n = 2,194)	(n = 1,557)	(n = 637)

Note: The table only refers to women with completed first work interruptions (i.e., where return to work had occurred by the time of the survey). Women with more than one interruption are included. Family reasons include marriage, pregnancy or childcare and moving to be with a partner. Non-family reasons include return to school, retirement, job ended or laid off, illness and other. Percentages were obtained from tables using weighted sample data. "n" indicates the sample size. Components may not add to totals due to rounding.

In summary, family considerations emerge as important factors in women's work interruptions. Women who are (or have been) married are likely to have more interruptions than women who have never married. Family considerations are cited as reasons for interrupting by a substantial proportion of women who interrupt and of the reasons classified as family considerations, it is pregnancy or childcare that is most frequently cited. It also appears that interruptions for family reasons are longer than those for non-family reasons. Work interruptions for never-married women are generally of short duration and over a quarter of never-married women report layoff or job ended as a reason for their first interruption. In **Changing Patterns of Labour Force Attachment,** it was suggested that younger cohorts of women appear to have a stronger attachment to the work-force than older women and based on an examination of the duration of interruptions which occurred for family reasons, again, there is some evidence of greater attachment to the work-force on the part of younger women.

Education and Work Interruptions

Education generally emerges as an important factor in a variety of aspects of women's labour market status whether the dimension of labour market status is participation, earnings or occupational attainment. Some caution is necessary here since education is **current** education and some interruptions may have occurred to acquire the education. However, return to school is infrequently mentioned as a reason for interrupting work by the respondents to the FHS. One would expect that education would be relevant to work interruptions in several respects. Women with a university degree may be more committed to the work-force than women without a degree insofar as higher education is undertaken as a preparation for the labour market. Women who expect relatively continuous participation, in other words, may be those women who obtain a university education. Since higher education tends to provide access to higher status occupations and higher wages, for more educated women, the opportunity costs of time spent out of the work-force may be high. These costs include foregone earnings and missed opportunities for promotion.

Several implications follow with respect to work interruptions. One would expect to find that women with a university degree would exhibit greater continuity in employment. This means one would expect to find that a higher proportion of university-educated women would have no work interruptions and that they would experience fewer interruptions. One would also expect that if an interruption did occur, the duration would be shorter than for women without a university education and that women with a university degree would be more likely to return to a job that was full-time. One qualification to these expectations is that more educated women may have spouses with higher incomes than women without a university education (since people tend to marry persons with similar characteristics) and this may partially offset the more continuous participation expected of highly educated women. The Family History Survey does not contain income data so that this should be borne in mind in regard to the comments that follow.

Women with a university degree (about 10% of all women) are somewhat more likely than women in general to have worked continuously (see Table 21). Over half of women with a university degree report no interruptions compared with 42% of women overall who have been continuous workers. When no interruptions and only one interruption are combined, however, about the same proportions of women in general and women with a university degree fall into this category. It could be argued that since women's educational attainment has been increasing over time, the women with a university degree are likely to be younger and younger women have had less years of exposure to the risk of work interruptions. It appears that university educated women within age groups are somewhat more likely to be continuously employed.

TABLE 21. Distribution of Women (Age 18-65) by Number of Work Interruptions, Showing Level of Education

Number of work interruptions	Postsecondary education				
	None	Some	Certificate	University degree	Overall
	per cent				
None	38.3	51.8	45.3	53.0	42.1
One	45.3	36.1	36.6	34.1	42.0
Two	12.5	10.1	14.1	8.4	12.1
Three or more	4.0	2.1	3.9	4.4	3.8
Total	100.0	100.0	100.0	100.0	100.0
	(n = 4,070)	(n = 556)	(n = 946)	(n = 531)	(n = 6,103)

Note: This table is based on women who have ever worked on a regular basis. The percentages are derived from the weighted sample. "n" indicates the sample size. Components may not add to totals due to rounding.

Women with a university education, then, appear slightly less likely to interrupt their work activity. Looking at the duration of the first interruption for women who have returned to work, 54% of women with a university degree compared with 45% of women overall interrupted for two years or less (see Table 22). Combining the first two categories of duration, we find that overall, 65% of women spent five years or less out of the work-force for their first interruption. Of university women, 79% were out of the work-force for five years or less during their first work interruption. Controls for age were not possible due to small cell sizes.

Women with a university degree are about as likely to cite family considerations as a reason for their first interruption as women in other education categories (some postsecondary education or no postsecondary education). Women who cited family reasons for their first interruption appear to have interrupted for a shorter period of time if they were university educated compared with women in general. Again some caution is necessary because of the small numbers of women with a university education but 50% of women with a university degree who cited family reasons for their first interruption reported durations of two years or less compared with 34% of women in general who cited family reasons for the first interruption.

TABLE 22. Distribution of Women (Age 18-65) Who Have Completed First Work Interruption, by Duration of First Work Interruption, Showing Level of Education

Duration of the first work interruption	Postsecondary education				
	None	Some	Certificate	University degree	All education groups
	per cent				
Two years or less	42.3	51.9	48.1	53.6	45.2
Three to five years	19.2	15.0	23.0	25.7	20.1
Six or more years	38.6	33.0	28.9	20.7	34.7
Total	100.0	100.0	100.0	100.0	100.0
	(n = 1,411)	(n = 183)	(n = 392)	(n = 208)	(n = 2,194)

Note: The reader is cautioned that numbers are small, except for the women with no postsecondary education. The percentages for other groups are particularly liable to sampling error. The percentages are derived from the weighted sample data. "n" indicates the sample size. Components may not add to totals due to rounding.

It was expected that women with a university degree would be more likely to return to work full time rather than part time after an interruption. Overall, about 60% of women who worked full time before the first interruption occurred were full-time workers on their return to employment. For women with a university degree, the figure is slightly higher (66%) but the numbers are small so that the difference could reflect sampling error.

To summarize, then, concerning education and work interruptions, there is some evidence that university educated women are more continuous workers and that, at least in terms of the first interruption they may leave the work-force for a shorter period of time. The differences between university educated women and those without university education are surprisingly small. One possibility is that university women are not receiving rewards in the labour market commensurate with their education so they have less incentive to participate continuously. Family considerations are about as likely to be cited as reasons for the first interruption by university women as by women in general.

SUMMARY

Data sources such as the Census of Canada indicate a substantial increase in the labour force participation rates of women, an increase which is evident even among women with young children. Increases in the overall participation rate, though, do not necessarily imply that the continuity of women's work activity has also increased. The Family History Survey has permitted an examination of the continuity of women's work experience. In this report, two major issues have been examined: the difference, if any, in patterns of work activity of younger compared with older cohorts of women and the relation between the family and work interruptions.

A substantial proportion (over 40%) of women who have ever worked on a regular basis have never interrupted their work activity and even of those who have interrupted, the number of spells is small: most women who interrupt have experienced only one such interruption. The image of women being frequent interruptors is not supported by the data. The Family History Survey does not contain information on interruptions of less than a year's duration so that the picture may change if brief spells of non labour market activity were included and these interruptions, while brief, may nevertheless have an impact on women's economic status.

Younger cohorts of women appear to have a stronger attachment to the work-force than older women. A higher proportion of younger women have ever worked on a regular basis and younger cohorts are somewhat more likely to have worked before marriage than older ones. Young women appear to be more continuous workers. Some caution is necessary due to the time dependence aspect of interruptions: older women have had a longer exposure to the risk of interrupting work. It was mentioned, though,

that for older women, the number of interruptions may be understated so that this factor will tend to understate the extent of difference between younger and older cohorts. The duration of interruptions, at least with respect to the first one, may be shorter for younger cohorts compared with older cohorts.

With respect to the second issue examined in this report, the relation between family and work interruptions, family considerations emerge as an important factor in the discontinuity of women's work experience. Ever-married women are more likely than never-married women to have had a work interruption. Pregnancy and childcare are the most frequently cited reasons for a first work interruption and family considerations in general are cited as a reason for the first interruption by seven out of ten women who have interrupted at least once. Interruptions for family reasons tend to be longer in duration than those for non-family reasons but there is some tentative evidence that first work interruptions for family reasons made by women of younger cohorts may be shorter than the first interruptions for family reasons of older cohorts of women. Younger cohorts of women, however, do appear to be combining the dual roles of spouse and mother and participant in the paid work-force to a greater extent than women did in the past.

Several implications follow from the greater involvement of women in the labour force. If part of the difference in the economic status of men and women is a reflection of differences in continuity, then, as women's participation becomes more continuous, one would expect a reduction in gender inequality. To the extent that there is employer discrimination against women, whether in hiring or the availability of training opportunities, then as more women exhibit continuity in employment, the use of statistical discrimination(7) would presumably become less profitable.

Low fertility and the higher expectation of marital disruptions along with recent changes in the divorce laws may encourage women to retain ties with the paid work-force. The expectation of greater continuity of employment on the part of women may also lead to greater investment in education and job skills. While women are still underrepresented in graduate level university programmes, they have made considerable gains at the undergraduate level and the percentage of women graduating from male dominated fields such as business and engineering has been growing. We have yet to see the extent to which increases in women's attachment will be reflected in gains in economic status.

See footnote(s) at end of text.

FOOTNOTES

(1) The Canadian Fertility Survey Project is directed by T.R. Balakrishnan, Karol Krotki and Evelyne Lapierre-Adamcyk. The Survey interviewed approximately 5,000 women.

(2) It should be noted that some of the estimates discussed in the text are not to be found in included tabulations. Generally, this occurs when for a table the survey sample yielded only a few statistically-reliable estimates. In such cases, inclusion of the entire table in the report was not considered feasible.

(3) To minimize the effect of sampling variability, in this study every effort was made to use the largest possible sample. However, for inter-age-group comparisons, persons under 20 and those 65 years of age were generally excluded to maintain consistency with standard age categories. For the marginal age groups, no separate reliable estimates could be produced from the available sample.

(4) One way to evaluate the retrospective data on labour market activity is to match records from the survey with earlier historical records (e.g., census records) but this is very expensive. It also requires that data be collected in the survey to facilitate the linking with other records. Another method, comparison between aggregate published data (e.g., participation rates from earlier census) and rates estimated from the FHS raises various comparability problems due to changing definitions, migration, etc.

(5) An example of the problem with inferring cohort changes in the attachment to the work-force by the use of age groups at a point in time follows. Comparisons of labour force participation rates of women in say, 45-54 age group with rates for women in the 25-34 age group, where age is at a particular point in time (say, 1984) could not be used to infer greater participation on the part of younger cohorts of women since patterns of participation can differ across the life cycle. Women age 45-54 may have had a higher rate of participation in their late 20s and early 30s compared with their participation rates in the late 40s and early 50s. An appropriate comparison if one wanted to infer the change (if any) in cohort patterns of participation would be to examine participation rates of women age 25-34 in 1984 with the participation rate that women age 45-54 in 1984 had when they were aged 25-34. However, it is possible to compare for example, the per cent of women age 45-54 who worked before marriage with the per cent of women age 25-34 who worked before marriage and use such a comparison to infer cohort change in attachment as indicated by patterns of working before marriage. One could also infer cohort change by a comparison of the relative timing of first births and first work interruptions or the duration of completed interruptions for these age groups. Some caution is necessary as indicated in the text.

(6) The interest in this comparison is to assess whether at least with respect to the first interruption, younger women's interruptions are of shorter duration than those of older women. A case might be made for comparing the durations for women 25-34 with the experience of the older age group only up to when they (i.e., the older age group) were age 34. One of the difficulties in doing that is that the **timing** of the first interruption for this older age group may have been affected by the particular historical circumstances they experienced (Second World War). They may have interrupted later due to these circumstances and so by only considering their experience up to age 34, we may obtain a distorted picture.

(7) Statistical discrimination refers to judging individuals by group characteristics. In the context of gender statistical discrimination, the perception on the part of employers that on average women are less reliable workers than men affects the way in which individual women are treated (e.g., in hiring or promotions). The use of gender based statistical discrimination will not be a profitable (i.e., efficient) way of screening out unreliable workers if women are in fact, continuous workers (See Phelps 1972).

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